BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 13-203

13 FEBRUARY 1998

AIR FORCE MATERIEL COMMAND
Supplement 1

24 MARCH 1998

Space, Missile, Command, and Control

AIR TRAFFIC CONTROL

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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Supersedes AFI 13-203,1 August 1997
AFI 13-203/AFMCS 1, 16 Aug 96

Pages: 224
Distribution: F

This instruction implements AFPD 13-2, *Air Traffic Control, Airspace, and Range Management.* It directs the management of US Air Force, AFRC, and ANG air traffic systems, personnel (to include DoD and contract civilians), and facilities. It directs the training of air traffic controllers, automation specialists (AUS), the administration of facilities, the use of equipment, and the operation of control towers and air traffic control (ATC) radar facilities, and AUS work centers. It guides the Airfield Operations Board and the ATC quality assurance programs. Send major command (MAJCOM) supplements to this directive to the Air Force Flight Standards Agency, Air Traffic Control Directorate (AFFSA/XA) for approval prior to implementation. This instruction requires the collection and maintenance of information protected by the Privacy Act of 1974. The authority to collect and maintain the records prescribed in the instruction is Title 10, United States Code, Section 8013. Privacy Act system of records notice F035 AFPC applies. **Attachment 1** lists References And Other Supporting Information used in this instruction.

(AFMC) This supplement applies to AFMC activities that operate or administer an air traffic control (ATC) or navigational aid facility, and includes the operation of a Radar Control Facility (RCF). It does not apply to the Air National Guard or US Air Force Reserve units and members except as outlined in memorandums of understanding. Base-level supplements to this directive require MAJCOM approval and must be forwarded to HQ AFMC/DOA.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

This change incorporates interim change (IC) 98-1 which adds GS-2152 (civilian) to qualifications for CCTLR, CATCT, CSE, and TERPS (1.1.4.1.1., 1.1.5.1.1., 1.1.7.1.1., and 1.1.13.1.1.); further defines

facility rating, position certification, and position currency requirements at short tour locations for the CATCT, CSE, and TSN (1.1.5.1.2., 1.1.7.1.2., and 1.1.14.1.2.); adds 13MX to watch supervisor qualifications (1.1.8.1.1.); clarifies selection authority for watch supervisors (1.1.8.1.3.); further defines Chief, ATC Automation (CATCA) responsibilities, paragraphs 1.1.9.1.2., 1.1.9.1.4., 1.1.9.2.2.5., 1.1.9.2.4.1. through 1.1.9.2.4.4.; deletes redundant CATCA responsibilities, paragraphs 1.1.9.2.7. through 1.1.9.2.11.1.; further defines ATC Automation Specialists qualifications (1.1.10.1.3. and 1.1.10.2.3.); redirects overall responsibility for TERPS from WG/CC to OG/CC (1.1.13.); amends one aircraft at a time requirement (1.5.); adds Emergency Staffing Level guidance, 1.5.8. through 1.5.8.5.; incorporates new recorder and tape procedures and nomenclature (1.9., 2.7.1., 11.2., 11.5., 11.6.1., 11.8., and 11.8.2.); further defines Airfield Operations Flight (AOF) officers ATC experience requirements (1.3.1.1.); further defines the types of facility operating instructions not to send to MAJCOM (1.10.2.); deletes all references to ASLAR (2.3., 2.11.5.3., 4.9.5., 6.7.3.); stipulates MAJCOM authority for installing emergency warning and evacuation alarms (2.6.); expands guidance for snow affects on glide slopes (2.21.2.1.); clarifies software maintenance support (2.27.1.2.); requires MAJCOM to forward authorized/approved functional use of tower radar displays to AFFSA/XA for review (3.5.); amends and expounds upon the Arrival/Departure separation criteria (3.9.); clarifies certification/validation process for ATCALS (4.11.2.); adds MSAW operational check requirements (4.15.1.); clarifies Diverse Vector Area (DVA) procedures (4.17.1.2., 4.17.1.2.3., 4.17.5.); adds operations and procedures requirements for Center Radar Presentation (CENRAP), paragraphs 4.23 through 4.23.9.1.2.; deletes AUS TCG training requirements (6.3.3.1.1.); amends minimum AUS TCG requirements (6.3.3.2.); clarifies Combat Skills Familiarization Training with respect to SEI issuance (6.5.1.3. and 6.6.6.); further defines TERPs knowledge/task items certification exemption (6.6.2.2.); adds NOTE to ATCTD (6.7.); adds CENRAP to semi-annual training requirements (6.12.13.); removes the requirement to document results of special evaluations on daily events log (8.7.1.1. and 8.7.1.2.); clarifies drug and alcohol abuse AFSC withdrawal procedures (9.3.2.2.); provides MAJCOM authority to select date to review current indexes (10.6.); revises traffic count program, paragraphs 11.18.1.1. through 11.18.3.; deletes JANAP 146E and AFMAN 13-214 from attachment 1 (references); deletes ASLAR and adds (DAT) to attachment 1 (abbreviations); amends definition of RFC facility and multiple approach in attachment 1 (terms); adds a definition for RFC service in attachment 1 (terms); separates attachment 14 into two attachments (14 and 15); amends BLA Report to every other year and adds note for USAFE and PACAF (14.1.1.7.); corrects applicable plans to be familiar with (14.1.2.1.); corrects reference from AFI to AFM (14.1.4.); further defines UTC tasked controllers mobility equipment requirements (14.2.2.4.); changes USAF WMP, all volumes (U) to (S) (14.4.8.); adds attachment 16 (Required LOP and Base Airfield Operations Instruction Items) tables A16.1. and A16.2., and incorporates guidance (1.10. and 10.5.); and adds attachment 17, IC 98-1. A bar (|) indicates revisions from the previous edition. See **Attachment 17**, IC 98-1 for the complete IC.

(AFMC) Changes are too numerous to list individually, review the entire supplement.

AFI 13-203, 13 February 1998, is supplemented as follows:

PART 1

MANAGING PERSONNEL

Chapter 1

PERSONNEL TITLES, QUALIFICATIONS, RESPONSIBILITIES, AND RESTRICTIONS

1.1. Airfield Operations Flight (AOF) Unit Manning Document (UMD) Authorizations: The following personnel titles are intended to standardize duty titles and the scope of responsibility of personnel assigned to the AOF. Duty titles are based on earned UMD authorizations. Failure to use authorizations as described and earned on the UMD could result in reduction of these authorizations during manpower standard reviews. Failure to adhere to manpower standards has possible flight safety implications. Therefore, deviations to prescribed AOF manpower standards and structure may result in a problem during Airfield Operations Standardization Evaluations conducted under the provisions of AFI 13-218. Units should request a variance to the manpower standard when additional related responsibilities levied on the AOF merit increased manpower authorizations. HQ AFFSA is the approval authority for variances.

1.1.1. Airfield Operations Flight Commander (AOF/CC):

NOTE:

Locations with civilian or enlisted personnel in this duty position will use duty title: "Airfield Operations Manager."

1.1.1.1. Qualifications:

1.1.1.1.1. Must hold Air Force specialty code (AFSC) 13MX at locations that have a USAF air traffic control and/or airfield management function.

1.1.1.1.2. Must have completed Air Traffic Control technical course # E3OBR13M1-000, E3ABR1C131-000 (if prior enlisted air traffic controller), or DoD or FAA equivalent course.

1.1.1.1.3. Must have completed Air Traffic Control Officer Training Program (OTP) course # AFFSA 13M3-000 or AFFSA 13M3-001 (if prior enlisted air traffic controller).

1.1.1.1.4. When two or more officers are assigned to the AOF, they must complete facility certifications/ratings as described in paragraph 1.3, within 6 months of arrival at a new assignment location. If only one ATC officer is assigned to the AOF, that officer must complete facility certifications/ratings as described in paragraph 1.3., within 12 months of arrival at a new assignment location. Officers in qualification training must not be assigned any additional duties until they have completed qualification training.

1.1.1.1.5. Complete AT-M-11, Air Traffic Control Officer Training Guide within 6 months of arrival at the first duty location. Document in AF Form 623.

1.1.1.1.6. Complete AT-M-10, Airfield Management Training Guide, within 1 year after completion of AT-M-11 if at first duty location. Document in AF Form 623.

1.1.1.1.7. Obtain flightline driving certification.

1.1.1.1.8. Attendance at Military Airfield Manager Course E3AZR1C091000, PDS Code 200, is desired.

1.1.1.1.9. When additional airfield operations officers are assigned, the more senior/experienced officer should normally be designated as the Airfield Operations Flight Operations Officer (AOF/DO) and the more junior officer should normally be designated as the Airfield Operations Flight Systems Officer (AOF/SO)

1.1.1.2. Responsibilities:

1.1.1.2.1. Responsible for the overall operation/services provided by the airfield operations flight, in support of the wing flying mission and in compliance with USAF and Federal Aviation Administration (FAA) guidelines or host-nation Aeronautical Information Publication (AIP), whichever is applicable.

1.1.1.2.2. Responsible for ensuring safe and expeditious air traffic control and airfield management services are provided to military and civil aviators operating within the terminal airspace and on the airdrome (airfield) of their respective location, in accordance with FAA Order 7110.65 and USAF requirements.

1.1.1.2.3. Responsible for developing, coordinating, and maintaining the base Airfield Operations Instruction. (Content of the base Airfield Operations Instruction is discussed in chapter 10.)

1.1.1.2.4. Coordinate the agenda and record the minutes of the base Airfield Operations Board. (Airfield Operations Board requirements are described in chapter 12.)

1.1.1.2.5. Support the wing flight safety office in accomplishing requirements established in the US Air Force Mishap Prevention Program and Bird Aircraft Strike Hazard (BASH) Program.

1.1.1.2.5.1. Provide the following support to the wing Mid Air Collision Avoidance (MACA) Program.

1.1.1.2.5.1.1. Establish a formal pilot/controller liaison program as described in chapter 12 that includes airfield management involvement.

1.1.1.2.5.2. Ensure AF Form 651**, Hazardous Air Traffic Report (HATR)**, is available at base operations facilities and in all USAF ATC facilities.

1.1.1.2.5.3. Work closely with the base flight safety office throughout the HATR investigation process. Assist in clearly describing/explaining the reasons for air traffic control incidents and how corrective actions will prevent reoccurrence. Provide comments and concurrence or non-concurrence on all HATR notifications. Inform the base flight safety office of all corrective actions, whether wing or higher headquarters initiated, in response to HATRs involving air traffic control.

1.1.1.2.6. Support the wing flight safety office in accomplishing accident investigations according to AFI 91-204.

1.1.1.2.6.1. Establish procedures to ensure airfield operations personnel do not release information regarding aircraft incidents or accidents to unauthorized agencies. ***NOTE:*** It

is US Air Force policy not to release names to outside agencies, including FAA, without the approval of HQ USAF/XOO.

1.1.1.2.6.2. Establish procedures to ensure protection/appropriate release of recorded information pertinent to aircraft mishaps, alleged flying deviations, and hazardous air traffic reports, as described in chapter 11.

1.1.1.2.7. Ensure airfield operations facilities and activities provide effective support of the base flying mission and transient aircrews.

1.1.1.2.7.1. Ensure airfield operations support is provided to tenant units according to host-tenant agreements.

1.1.1.2.7.2. Coordinate in developing and applying base-wide operational plans for responding to aircraft incidents, in-flight emergencies, accidents, evacuations, or similar disasters on or off base.

1.1.1.2.7.3. Ensure noise abatement program requirements are published in the base Airfield Operations Instruction.

1.1.1.2.7.4. Coordinate with appropriate flying organizations on the location of and access to runway supervisory units (RSU). ***NOTE:*** RSU operations, including staffing, equipment, and maintenance are not a function of the airfield operations flight.

1.1.1.2.8. Develop/coordinate on necessary Letters of Agreement with the FAA and other military/civilian agencies to establish support for base flying activities.

1.1.1.2.9. Coordinate with local flying activities and adjacent FAA ATC facilities (when appropriate) on changes or adjustments to the base flying environment, including VFR traffic procedures.

1.1.1.2.9.1. Coordinate with wing stan-eval, airspace management, the flight safety office, the terminal instrument procedures specialist, and adjacent civil/military airfields, as appropriate, to designate and publish local VFR flying areas and VFR traffic pattern (see Atch 13). Ensure descriptions of VFR flying areas and the VFR traffic pattern are published in the Base Airfield Operations Instruction.

1.1.1.2.9.2. Ensure a VFR flying area chart is provided to appropriate ATC agencies, to include satellite airfields/airports, and is posted in the base operations' flight planning room. Coordinate with wing stan-eval, airspace management, the flight safety office, the terminal instrument procedures specialist, and adjacent civil/military airfields, as appropriate.

1.1.1.2.9.3. Maintain a close liaison with the wing airspace manager to ensure that changes to special use airspace are properly integrated into the air traffic system.

1.1.1.2.9.4. Coordinate on specific areas for disposal of aircraft external stores or jettisoning cargo from in-flight aircraft.

1.1.1.2.10. Ensure a Cooperative Weather Watch (CWW) program is implemented and maintained according to AFMAN 15-111, *Surface Weather Observations* and AFJQS 1C1X1-001.

1.1.1.2.10.1. CWW Training and Certification. The local weather unit trains and certifies controllers to take CWW observations including tower visibility observations, limited

weather observations, local weather phenomenon training, and the use of weather equipment (readouts) used by controllers according to CWW guidance provided in AFMAN 15-111 and the AFJQS 1C1X1-001. Local weather element reporting requirements will be outlined in an LOP. Tower controllers observe and report weather conditions as a secondary function to air traffic control.

1.1.1.2.10.2. Air Traffic Control Familiarization Training for Weather Personnel.

1.1.1.2.10.3. Ensure a program to familiarize weather personnel with ATC operations is developed. The Air Traffic Control unit indoctrinates newly assigned weather personnel on the local air traffic control mission, effects of weather on the local air traffic system, and the importance of timely receipt of weather information by controllers.

1.1.1.2.11. Ensure comprehensive training programs exist for ATC and AM personnel.

1.1.1.2.11.1. Chair the AOF Training Review Board (TRB).

1.1.1.2.11.2. Ensure Air Traffic Control Specialist (ATCS) Certificate award/withdrawal documentation/actions are accomplished.

1.1.1.2.11.3. Ensure overhead ATC staff maintains proficiency/currency.

1.1.1.2.11.4. Ensure the AM training program includes upgrade, qualification, recurring, and proficiency training.

1.1.1.2.12. Ensure all controllers on the AOF overhead staff meet appropriate physical qualification requirements according to AFI 48-123, *Medical Examination and Medical Standards*. ***NOTE:*** for GS-2152 personnel, FAA medical standards.

1.1.1.2.13. Inform the wing flight safety office of airfield maintenance and major construction projects. Coordinate with the wing flight safety office for participation in airfield preconstruction conferences/ briefings. This may be accomplished through the base airfield operations board. Coordinate with the wing flight safety office to support their requirements to accomplish airfield inspections prior to, during, and/or upon completion of airfield maintenance/construction.

1.1.1.2.14. Provide airfield operations support to Civil Engineering for Air Installation Compatible Use Zone (AICUZ) studies resulting from operational changes affecting the airfield.

1.1.1.2.15. Ensure the primary crash net is established. Ensure the secondary crash net is installed and operational according to AFI 13-213.

1.1.1.2.16. Establish or coordinate local procedures with the wing safety office (in addition to the requirements in AFI 91-204) for ground handling of aircraft with live armament (guns, missiles, and bombs) onboard.

1.1.1.2.17. Ensure a flightline drivers familiarization program is developed and implemented according to AFI 13-213, Airfield Management.

1.1.1.2.18. Together with the CAM, ensure airfield markings and signs are correct.

1.1.1.2.19. Ensure airfield inspections are conducted as prescribed in AFI 13-213. Ensure hazardous conditions are promptly reported to the appropriate base agencies and corrected in a timely manner.

1.1.1.2.19.1. Coordinate with the base civil engineer and local agencies on projects that impact airfield operations.

1.1.1.2.19.2. Coordinate on all waivers that affect local airfield or flying operations. Notify assigned and tenant flying activities of any waivers that affect aircraft operations. Ensure the terminal instrument procedures specialist, chief of airfield management, tower chief controller, and ATCALS maintenance review all airfield waiver packages.

1.1.1.2.19.3. Together with the CAM, Terminal Instrument Procedures (TERPS), base civil engineer and wing safety, participate in the annual review of all waivers to airfield and airspace standards.

1.1.1.2.20. Together with the CAM, coordinate airfield operations support with base flying units and security police to secure aircraft and prevent unauthorized flights.

1.1.1.2.21. Ensure that procedures are established to store transient aircrew classified materials.

1.1.1.2.22. Coordinate on personnel strike plans affecting airfield operations.

1.1.1.2.23. Ensure representation on the wing operations center (battle staff) during contingencies.

1.1.1.2.24. AOF/CC will review and initial daily events logs, comparing the obvious airfield related trend data. This includes increases in Foreign Object Damage (FOD) responses, flightline driving violations, Automated Weather Dissemination System (AWDS) outages, Bird/Aircraft Strike Hazard (BASH) activity, pavement deterioration, etc.

1.1.1.2.25. At contracted Airfield Management (AM) operations, ensures a primary and alternate Quality Assurance Evaluator (QAE) are appointed by the unit commander. Serves as the alternate Functional Area Chief (FAC) for contracted AM operations, ensuring the AM Performance Work Statement (PWS) and Quality Assurance Surveillance Plan (QASP) are developed IAW USAF and MAJCOM directives. ***NOTE:*** See AFI 63-504, *Quality Assurance Evaluator Program* and AFMAN 64-108, *Service Contracts.*

1.1.2. Airfield Operations Flight Operations Officer (AOF/DO):

1.1.2.1. Qualifications.

1.1.2.1.1. Must hold Air Force specialty code (AFSC) 13MX.

1.1.2.1.2. Must have completed Air Traffic Control technical course # E3OBR13M1-000 or E3ABR1C131-000 (if prior enlisted air traffic controller).

1.1.2.1.3. Must have completed Air Traffic Control Officer Training Program (OTP) course # AFFSA 13M3-000 or AFFSA 13M3-001 (if prior enlisted air traffic controller).

1.1.2.1.4. Must complete facility certifications/ratings as described in paragraph 1.3., within 6 months of arrival at a new location. If only one ATC officer is assigned to the AOF, he/she must complete facility certifications/ratings as described in paragraph 1.3., within 12 months of arrival at a new location. Officers in qualification training must not be assigned additional duties until they have completed qualification training.

1.1.2.1.5. Complete AT-M-11, Air Traffic Control Officer Training Guide within 6 months of arrival at the first duty location. Document in AF Form 623.

1.1.2.1.6. Complete AT-M-10, Airfield Management Training Guide, within 1 year after completion of AT-M-11 if at first duty location. Document in AF Form 623.

1.1.2.1.7. Obtain flightline driving certification.

1.1.2.1.8. Attendance at Military Airfield Manager Course, E3AZR1C091000, PDS Code 200, is desired.

1.1.2.2. AOF/DO Responsibilities.

1.1.2.2.1. The first responsibility of the AOF/DO is to establish a fundamental understanding of the Wing Air Traffic System's operational environment by completing the required facility certifications/rating.

1.1.2.2.2. Upon completion of facility certification/ rating requirements, the AOF/DO will assist in the overall management of the Airfield Operations Flight by performing duties/ projects as assigned by the AOF/CC. This assistance should be geared toward expanding the AOF/DO's technical, managerial, and leadership skills within the 13MX functional area, under the guidance of the AOF/CC. Specific managerial responsibilities of the AOF/DO should be specified in writing. Recommend responsibilities focused on operational requirements and procedures that impact day-to-day operations.

1.1.2.2.3. The AOF/DO will perform the duties of the AOF/CC in the absence of the AOF/ CC.

1.1.3. Airfield Operations Flight Systems Officer (AOF/SO).

1.1.3.1. Qualifications.

1.1.3.1.1. Must hold Air Force specialty code (AFSC) 13MX.

1.1.3.1.2. Must have completed Air Traffic Control technical course # E3OBR13M1-000 or E3ABR1C131-000 (if prior enlisted air traffic controller).

1.1.3.1.3. Must have completed Air Traffic Control Officer Training Program (OTP) course # AFFSA 13M3-000 or AFFSA 13M3-001 (if prior enlisted air traffic controller).

1.1.3.1.4. Must complete facility certifications/ratings as described in paragraph 1.3., within 6 months of arrival at a new location. If only one ATC officer is assigned to the AOF, he/she must complete facility certifications/ratings as described in paragraph 1.3., within 12 months of arrival at a new location. Officers in qualification training must not be assigned additional duties until they have completed qualification training.

1.1.3.1.5. Complete AT-M-10, Airfield Management Training Guide, within 1 year of arrival at the first duty location. Document in AF Form 623.

1.1.3.1.6. Complete AT-M-11, Air Traffic Control Officer Training Guide within 6 months after completion of AT-M-10 if at first duty location. Document in AF Form 623.

1.1.3.1.7. Obtain flightline driving certification.

1.1.3.1.8. Attendance at Military Airfield Manager Course, 3AZR1C091000, PDS Code 200, is desired.

1.1.3.2. AOF/SO Responsibilities.

1.1.3.2.1. The first responsibility of the AOF/SO is to establish a fundamental understanding of the airfield environment by completing required training and airdrome familiarization.

1.1.3.2.2. Upon completion of required training the AOF/SO will assist in the overall management of the Airfield Operations Flight by performing duties/projects as assigned by the AOF/CC. This assistance should be geared toward expanding the AOF/SO's technical, managerial, and leadership skills within the 13MX functional area, under the guidance of the AOF/CC. Specific managerial responsibilities of the AOF/SO should be specified in writing. Recommend responsibilities focused on systems established to support the AOF (e.g., Manpower support, personnel management, equipment support and planning, funding, and AOF training program).

1.1.4. Chief Controller (CCTLR):

1.1.4.1. Qualifications.

1.1.4.1.1. Must hold AFSC 1C100, 1C191, 1C171, or GS-2152 (civilian), have performed ATC duties for at least 5 years (not including instructor duty), and have 1 year experience in the type facility to manage, excluding RFC.

1.1.4.1.2. Must complete the CCTLR portion of the AFJQS 1C1X1-002 and AT-M-05, CCTLR Task Certification Guide within 6 months of initial assignment to the CCTLR position.

1.1.4.1.3. Must become position certified or facility rated and maintain proficiency/currency (within 6 months of date arrived station) as follows.

1.1.4.1.3.1. Tower, GCA, or RFC. Facility rating.

1.1.4.1.3.2. RAPCON. Certifications in approach and arrival.

1.1.4.2. Responsibilities.

1.1.4.2.1. Works directly for the AOF/CC and manages the internal operation of the ATC facility. Each ATC facility (except RFC) must have a CCTLR.

1.1.4.2.1.1. Establish a program to ensure controllers maintain proficiency in all positions they are certified in. This program must include minimum monthly position time requirements, a means of tracking position time, and actions that will be taken when a controller fails to meet requirements.

1.1.4.2.1.2. Determine the required minimum number of qualified controllers scheduled and present for duty based on published facility hours, scheduled flying, and services required by the OG/CC.

1.1.4.2.1.3. Outline requirements for pre-duty familiarization briefings and procedures that provide for a smooth transition from one crew to the next. Procedures must allow for continued ATC services without interruption and be published in a facility operating instruction.

1.1.4.2.1.4. Specify tolerance values for radar and video map (e.g. Video Map Generator) alignment evaluation by controllers in a facility operating instruction according to AFMAN 13-215, *ATC Radar Maps and Associated Systems* and applicable technical orders.

1.1.4.2.1.4. (AFMC) Detailed radar and video map and alignment procedures must be included in the appropriate ready reference file or equipment checklist to include:

- Method for checking range/azimuth of permanent echo's, T-shaped symbols, and Symbols depicting permanent echo's (carrots)
- Azimuth and distance values of permanent echo's (as they appear on Commissioning/special flight check report)
- Tolerance for T-shaped symbols (see applicable T.O.)
- Tolerance values for symbols depicting permanent echo's (carrots- See AFM 13-215, maximum tolerance is 1.7 degrees)
- Designed range scale of each video map

1.1.4.2.1.5.(Added) CCTLRs will define responsibilities and functions of each operating position in a facility Operating Instruction (OI).

1.1.4.2.2. Advise the AOF/CC and Operations Group staff on air traffic control procedural and safety of flight issues.

1.1.4.2.3. Implement approved air traffic control procedural changes in support of the wing flying mission and Federal Aviation Administration requirements.

1.1.4.2.4. Ensure effective management of manpower resources assigned to the ATC facility.

1.1.4.2.4.1. Ensure all assigned controllers meet appropriate physical qualification requirements according to AFI 48-123.

1.1.4.2.4.2. Ensure the Controller Development Program (CDP) is implemented according to the CDP OI. When necessary, initiate corrective measures to ensure the CDP meets mission and CCTLR requirements.

1.1.4.2.4.3. Ensure all training record discrepancies, as identified in the CATCTs training record inspection results report, are corrected monthly.

1.1.4.2.4.4. Ensure all controllers are trained on the proper use of the ATCTD radar simulation system.

1.1.4.2.4.5. Specify training scenario development and management duties/responsibilities of TDSAs in writing.

1.1.5. Chief, Air Traffic Control Training (CATCT):

1.1.5.1. Qualifications.

1.1.5.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and have performed duties in AFSC 1C1X1 for at least 5 years (not including instructor duty).

1.1.5.1.2. Must be facility-rated, including coordinator positions, in all facilities, before assuming duties (except at short tour locations), and maintain proficiency/currency. At RAPCON locations with high density traffic (more than 25,000 operations quarterly), or at short tour locations, the CATCT must maintain proficiency/currency in approach control, assistant approach control, and local control positions rather than all positions.

1.1.5.1.3. Must complete the CATCT portion of the AFJQS 1C1X1-002 and the CATCT section of AT-M-04, TSN Task Certification Guide within 6 months of initial assignment to the CATCT position.

1.1.5.1.4. Attendance at Instructional Systems Designer Course, #J3AZR3S200, is recommended. See AFCAT 36-2223, *USAF Formal Schools,* for enrollment procedures.

1.1.5.2. Responsibilities.

1.1.5.2.1. Works directly for the AOF/CC. At those locations where the flight support element authorizes only one 1C1X1, the duty title will be Chief, ATC Training and Standardization (TSN). Responsibilities include those of CATCT and Chief, Standardization and Evaluation (CSE).

1.1.5.2.2. Develop and manage the unit air traffic CDP.

1.1.5.2.3. Coordinate the CDP requirements with the AOF/CC, CCTLRs, and CSE, and CATCA.

1.1.5.2.4. Monitor facility training capability.

1.1.5.2.5. Prepare and coordinate monthly training schedule (i.e., training classes) with ATC staff.

1.1.5.2.6. Coordinate monthly controller proficiency training requirements with ATC staff. Provide controllers with a monthly proficiency training requirements letter. Include as a minimum, required review, recurring, and supplemental training for the month.

1.1.5.2.7. Inspect training records documentation for accuracy, completeness, and standardization. Provide AOF/CC and CCTLRs, and CATCAs written results of training records inspections, at least monthly.

1.1.5.2.8. Manage computer-based instructional programs.

1.1.5.2.9. Manage training review board.

1.1.5.2.10. Develop master facility and workcenter training records (AF Form 623).

1.1.5.2.11. Develop and maintain facility/workcenter master training plan according to paragraph 6.15.

1.1.5.2.12. Specify duties/responsibilities of ACATCTs in writing. Coordinate ACATCT activities with CCTLR.

1.1.5.2.13. Review Field Evaluation Questionnaires (FEQ) for validity prior to submission.

1.1.5.2.14. Coordinate and process annual formal school training requirements according to AFCAT 36-2223, *USAF Formal Schools.*

1.1.5.2.15. Ensure Training Status Codes (TSC) reflect accurate status of personnel assigned according to AFI 36-2201, attachment 4.

1.1.5.2.16. Advise and assist the Airfield Management Training Manager in developing the Airfield Management On-the-Job training program. ***NOTE***: Assistance shall not interfere with the management of the CDP.

1.1.6. Chief, Air Traffic Control Officer Training (CATCOT). This title is designated for 13MX officers responsible for the Air Traffic Control Officer Training Program. Qualifications and responsibilities are described in AFI 36-2210.

1.1.7. Chief, Standardization and Evaluation (CSE):

1.1.7.1. Qualifications.

1.1.7.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and have performed duties in AFSC 1C1X1 for at least 5 years (not including instructor duty).

1.1.7.1.2. Must be facility-rated, including coordinator positions, in all facilities (except at short tour locations), before assuming duties, and maintain proficiency/currency. At short tour locations the CSE will maintain proficiency/currency in the most complex facility. An assistant CSE (CTO examiner when appropriate) must be available to perform certifications and ratings in the facilities in which the CSE is not rated.

1.1.7.1.3. Must complete the CSE portion of the AFJQS 1C1X1-002 and the CSE section of AT-M-04, TSN Task Certification Guide within 6 months of initial assignment to a CSE position.

1.1.7.2. Responsibilities.

1.1.7.2.1. Works directly for the AOF/CC. Administers the ATC certification and rating program according to FAA Order 7220.1, FARs, and Air Force requirements. Serves as the primary Air Traffic Control Specialist (ATCS) examiner. When the FAA delegates responsibilities to the local unit, will also serve as the Control Tower Operator (CTO) examiner.

1.1.7.2.2. Perform position certification/facility ratings and special evaluations using standards established in the CDP.

1.1.7.2.3. Evaluate CDP to ensure it meets mission and CCTLR and CATCA requirements. At locations with a TSN only, the AOF/CC will appoint a facility rated 7 level to evaluate the CDP. Evaluate components of the CDP utilizing guidance contained in AFMAN 36-2234, chapter 7, section C, and chapter 8.

1.1.7.2.4. Specify duties/responsibilities of ACSEs in writing. Coordinate ACSE activities with CCTLRs

1.1.7.2.5. Develop and administer monthly controller proficiency tests and other associated evaluation requirements.

1.1.8. Watch Supervisor (WS) or Senior Controller (SC):

1.1.8.1. Qualifications.

1.1.8.1.1. Must hold AFSC 1C100, 1C191, 1C171, or 13MX, have performed duties in AFSC 1C1XX/13MX for at least 4 years (not including instructor duty or OTP), and have one year's experience in type facility to supervise, excluding RFC.

1.1.8.1.2. Must be rated in all positions, including coordinator positions, and maintain proficiency.

1.1.8.1.3. Must complete the facility WS Task Certification Guide prior to performing duties as a WS and be selected/appointed by the CCTLR.

1.1.8.1.4. GS-2152 Qualifications. Before assuming WS/SC duties, GS-2152 controllers must meet the following minimum qualifications:

1.1.8.1.4.1. Completed AT-M-03, *Craftsman Task Certification Guide*. Note*:* Only needs to be completed once, prior to initial appointment as a WS/SC.

1.1.8.1.4.2. Completed the facility WS Task Certification Guide.

1.1.8.1.4.3. Must have at least four years DoD or FAA air traffic control experience (not including instructor duty), and have one year experience in the type facility to supervise (RAPCON satisfies the GCA experience requirement).

1.1.8.1.4.4. Rated in all positions within the facility and maintain proficiency.

1.1.8.1.4.5. Selected/appointed by the AOF/CC.

1.1.8.2. Responsibilities.

1.1.8.2.1. Responsible for the overall operations of the facility during their shift and maintains general situational awareness of air traffic.

1.1.8.2.2. If necessary they may limit or disapprove operations based on existing traffic congestion or complexity, staffing, weather, and individual controller training and experience.

1.1.8.2.3. A senior controller is also simultaneously responsible for duties at an operating position.

1.1.8.3. Military-Civilian equivalency:

1.1.8.3.1. 7-Level: Individual hired as an air traffic control supervisor and meets the requirements in paragraph 1.1.8.1; or individual hired as an air traffic controller (line controller) and meets the requirements in paragraph 1.1.8.1.

1.1.8.3.2. 5-Level: Individual hired as an air traffic controller (line controller), has completed a facility rating, and maintains proficiency.

1.1.9. Chief, Air Traffic Control Automation (CATCA).

1.1.9.1. Qualifications.

1.1.9.1.1. Must hold PAFSC G1C191, G1C171, or GS-2152 with automation equivalency, have performed ATC automation duties in AFSC G1C1X1 or GS-2152 automation equivalency for at least 3 years, and have one year experience in type of automation workcenter to manage.

1.1.9.1.2. Must become position certified or facility rated within 6 months of initial assignment to the CATCA position and maintain proficiency/currency as specified by the AOF/CC. Minimum certifications to obtain are approach control and assistant approach control (equivalent positions for enroute/range facilities) or arrival control and assistant arrival control in GCA facilities. Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility. *EXCEPTION:* MAJCOMs may or may not require GS-2152 CATCAs to obtain position certifications. If MAJCOMs do not require position certifications for GS 2152 CATCAs, they will be required to monitor/observe facility operations as specified by

the AOF/CC. This is to ensure an understanding of the operations and requirements of the local air traffic control system.

1.1.9.1.3. Upon completion of local qualification training, must retain this duty for a minimum of 3 years, unless PCSed to another duty location. This is to ensure effective management of AUS formal school training allocations and continuity of automation mission support at the unit level.

1.1.9.1.4. (Added) Must complete the CATCA AF Form 797 task items and CATCA Task Certification Guide within 6 months of initial assignment to the CATCA position.

1.1.9.2. Responsibilities:

1.1.9.2.1. Works directly for the AOF/CC. Manages the internal operation and establishes procedures for the ATC automation workcenter. Each ATC automation workcenter must have a CATCA.

1.1.9.2.2. Directs automation activities for system analysis and design, programming operations, maintenance, security, systems management, technical support, and resource management. Assists functional users in defining requirements. Recommends automation methods to enhance resource use.

1.1.9.2.2.1. Maintains precise configuration control over ATC operational computer programs ensuring compliance with FAA, USAF, and local directives and specifications for the NAS.

1.1.9.2.2.2. Evaluates and coordinates automated system updates and enhancements with the ATC staff prior to implementation. After coordination, implements approved ATC automation programming and functional system changes in support of the wing flying mission and FAA requirements.

1.1.9.2.2.3. Directs actions when system deficiencies are recognized by ensuring the adequacy of failure recovery and de-bugging procedures. Coordinates software problems with the ATC staff, CATCAs at other sites, MAJCOM, the appropriate FAA region, and field support personnel. Documents and submits NAS Change Proposals (NCP), Program Technical Reports (PTR), and other automated system enhancement/deficiency reports as required.

1.1.9.2.2.4. Directs and plans testing of ATC automation computer software.

1.1.9.2.2.5. Coordinates with the TERPS Specialist to obtain the MAJCOM approved MSAW and MVA data. Responsible for the automated ATC radar system database administration of site adaptation, MSAW, and digital mapping. Manages the continuous data recording (CDR) and playback systems.

1.1.9.2.3. Advises the AOF/CC and Operations Group staff on air traffic control automation procedural and safety of flight issues.

1.1.9.2.4. Determines training requirements and ensures that an automation training program is developed that meets knowledge and skill requirements and enhances professional awareness of computer technologies. CATCAs must coordinate with the CATCT or TSN to ensure the automation training program conforms with the Instructional System Development (ISD) principles according to AFMAN 36-2234, and Chapter 6.

1.1.9.2.4.1. Provides the CATCT, as a minimum, with quarterly proficiency training inputs for the ATC automation workcenter proficiency test.

1.1.9.2.4.2. Ensures the CDP is implemented according to the CDP OI. When necessary, implements corrective measures to ensure the CDP meets mission and CATCA requirements.

1.1.9.2.4.3. Ensures all AUSs complete the monthly controller and quarterly AUS proficiency tests developed by the CSE.

1.1.9.2.4.4. Ensures all training record discrepancies, as identified in the CATCT's training record inspection results report, are corrected monthly.

1.1.9.2.5. Ensures all FAA automated system software/hardware documentation and applicable Communications-Computer Systems (C-CS) directives (33 series) are maintained in the automation workcenter.

1.1.9.2.6. Ensures effective management of manpower resources assigned to the ATC Automation workcenter.

1.1.9.2.6.1. Determines the required minimum number of qualified automation specialists scheduled and present for duty based on system requirements, published facility hours, scheduled flying, and services required by the OG/CC.

1.1.9.2.6.2. (Added) Ensures all assigned automation specialist's meet appropriate flight physical qualification requirements according to AFI 48-123, *Medical Examination and Standards* (FAA medical standards for GS-2152 personnel).

1.1.9.2.6.3. (Added) Specifies responsibilities/duties of Assistant CATCA (ACATCA) in writing.

1.1.9.2.7. DELETED.

1.1.9.2.8. DELETED.

1.1.9.2.9. DELETED.

1.1.9.2.10. DELETED.

1.1.9.2.11. DELETED.

1.1.9.2.11.1. DELETED.

1.1.10. Air Traffic Control Automation Specialist (AUS).

1.1.10.1. Qualifications.

1.1.10.1.1. Must hold PAFSC G1C171, G1C151, or GS-2152 with automation equivalency and have performed duties in AFSC 1C1X1 or GS-2152 (see 1.1.8.3.) for at least 3 years (not including instructor duty).

1.1.10.1.2. Must achieve a minimum score of 71 on the USAF Electronic Data Processing Test (EDPT). A description of the test is contained in AFI 36-2605.

1.1.10.1.3. Must become position certified or facility rated within 6 months of initial assignment to the AUS position and maintain proficiency/currency as specified by the AOF/CC. Minimum certifications to obtain are approach control and assistant approach control (or

equivalent positions for enroute/range facilities) or arrival control and assistant arrival control in GCA facilities. Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility. *EXCEPTION:* MAJCOMs may or may not require GS-2152 AUSs to obtain position certifications. If MAJCOMs do not require position certifications for GS 2152 CATCAs, they will be required to monitor/observe facility operations as specified by the AOF/CC. This is to ensure an understanding of the operations and requirements of the local air traffic control system.

1.1.10.1.4. Must complete the Apprentice C-CS Programming Specialist course, #E3AZR3C032-001, and the ATC radar automation system Software Maintenance/AUS formal course(s) for the system supported at the site. See AFCAT 36-2223, *USAF Formal Schools*, for enrollment procedures. Completion of the above formal courses and experience requirements outlined in AFMAN 36-2108, attachment 2, are required for the award of the G prefix to the PAFSC. Additional functional area experience can not be substituted for the above formal school attendance requirements for award of the G prefix.

1.1.10.1.5. AUSs cannot work unmonitored and are not considered qualified until they have successfully completed all required formal training courses and local qualification training task items.

1.1.10.1.6. Must have a working knowledge of DOS, WINDOWS, and UNIX applications or complete this training prior to performing AUS duties unmonitored. Knowledge of or training in database management and local area network (LAN) principles is recommended. Training may be provided by the wing small computer section, distance learning, or other viable computer training sources.

1.1.10.1.7. Upon completion of local qualification training, must retain this duty for a minimum of 3 years, unless PCSed to another duty location. This is to ensure effective management of AUS formal school training allocations and continuity of automation mission support at the unit level.

1.1.10.2. Responsibilities.

1.1.10.2.1. Maintains general situational awareness and is responsible for the overall operation and monitoring of the facility's ATC automated systems during their shift.

1.1.10.2.2. Develops, modifies, integrates, and tests computer software. Arranges test routines and prepares documentation.

1.1.10.2.3. Performs system updates. Integrates the automated ATC radar system's site adaptation, MSAW, and digital map databases.

1.1.10.2.4. Recommends system enhancements and functional changes and identifies system problems. Documents and reports enhancements and system problems as required.

1.1.10.2.5. Stores, controls, and safeguards automated systems operational computer software programs IAW LOP. Maintains the CDR storage library and administers CDR disc changes as required.

1.1.10.2.6. Performs system playbacks, backups, and restores IAW LOP.

1.1.10.2.7. Educates users on the operational use of supported computer systems.

1.1.10.2.8. Ensures compliance with directives governing security of automated ATC computer systems.

1.1.10.2.9. Assists the CATCT in developing and integrating controller training scenarios for the automated ATC radar system.

1.1.11. Chief, Airfield Management (CAM). The CAM works directly for the AOF/CC and manages Airfield Management facilities to ensure effective support to the base flying mission and transient aircrews.

1.1.11.1. Plans, Organizes, and directs airfield management.

NOTE:

See AFI 13-213, Airfield Management.

1.1.12. Chief, Base Operations (CBO). Works directly for the CAM and manages Base Operations activities to ensure effective support to the base flying mission and transient aircrews.

NOTE:

See AFI 13-213, Airfield Management.

1.1.13. Terminal Instrument Procedures Specialist (TERPS) NCO. The OG/CC is responsible for the base TERPS program. The AOF/CC will appoint a Unit TERPS NCO to manage the day-to-day operation.

1.1.13. (AFMC) The AOF/CC will appoint an alternate TERPS specialist and include duties and responsibilities in the appointment letter.

1.1.13.1. Qualifications.

1.1.13.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and complete course E3OZR13B4A-000, (Automated) Terminal Instrument Procedures. *NOTE*: Graduates of Terminal Instrument Procedures course E30ZR1611-00 meet this requirement.

1.1.13.1.2. Must be facility rated prior to assuming primary TERPS NCO duties. Recommend the TERPS NCO be assigned to the radar facility or be dual qualified (if assigned to the tower).

1.1.13.1.3. Must complete the appropriate TERPS section of AFJQS-002, within 6 months of initial duty assignment as a primary or alternate TERPS NCO. If there are no other TERPS qualified personnel at the unit, MAJCOMs will ensure task certification support is provided.

1.1.13.1.4. Once assigned, must retain this duty for a minimum of 2 years, unless PCSed to another duty location. This is to ensure effective management of TERPS technical school training allocations and continuity of TERPS mission support at the unit level.

1.1.13.2. Unit TERPS Responsibilities.

1.1.13.2.1. Initiates actions essential to the fulfillment of TERPS program objectives assigned by their parent MAJCOM TERPS office and appropriate directives.

NOTE:

Situations may occasionally require extension beyond written and specific terms of a directive. Where safety or practicality of air navigation is a factor, the TERPS specialist cognizant of the situation will take action to change the situation.

1.1.13.2.2. Using the most accurate information available; plots, verifies and updates computerized obstruction and airfield data from maps, civil engineering maps, charts, surveys, and computer data bases. Maintains master obstruction maps.

1.1.13.2.3. Prepare automated (manual when applicable) instrument procedure packages for approaches, departures, and Standard Terminal Arrival Routes, to meet mission needs. Prepare Diverse Departure computations, Minimum Vectoring Altitude Charts (MVAC), and Minimum IFR Altitude Charts (MIFRAC). ***NOTE:*** When obstacles are added/deleted from the TERPS data base, all instrument procedures, including Diverse Departure, MVAC, MIFRAC, and MSAW/LAAS operations must be re-evaluated.

1.1.13.2.4. Coordinate new and revised instrument procedures with appropriate agencies.

1.1.13.2.4. (AFMC) Computes revised visibility minima, IAW AFMAN 11-230, A5.9, item 29, for approach light out conditions, and ensure they are published on the approach plates.

1.1.13.2.5. Notify the MAJCOM TERPs office whenever your location/obstacle data base has been modified.

1.1.13.2.6. Maintain TERPS Publications IAW AFMAN 11-230, Attachment 1 and TERPS files IAW USAF, MAJCOM, and base directives.

1.1.13.2.7. Develop and maintain a continuity folder including, as a minimum (See MAJCOM supplement, if applicable), the following:

- Key Personnel.
- Projects in Progress.
- Procedures Listing.
- TERPS Equipment Listing.
- Listing of Local References (Wing Regulation, etc.).
- File Maintenance and Disposition Plan.
- FLIP Cycle Review Log.
- Annual Validation and Procedure Amendment Log.
- Copy of completed Annual/Semiannual Self Inspection ATSEP Checklist (See AFI 13-218, Air Traffic System Evaluation Program for checklist).

1.1.13.2.8. TERPS files will contain current C-1, C-2, E-1, E-2, and E-3 Comprehensive Plan maps. Other maps are optional. ***NOTE:*** AFI 32-7062, *Air Force Comprehensive Planning*, provides Comprehensive Plan map guidance.

1.1.13.2.9. Instrument Procedures Report. **RCS: HAF-XO(A)9609** Conduct annual review of instrument procedures and provide written correspondence to parent MAJCOM NLT 15 September. The review should validate the need for each procedure, and ensure that each procedure meets mission requirements.

1.1.13.2.10. Conduct a biennial (every 2 years) review to include the following:

1.1.13.2.10.1. Obstacle data base. ***NOTE:*** Obstacle data bases should be updated and documented as changes occur (i.e., map revisions, CHUM changes, etc.). Evaluate vegetation growth and new/proposed construction (The purpose of this evaluation is to ensure that vegetation growth was considered and review all updates made over the past two years).

1.1.13.2.10.2. Review/validate need for existing waivers and ensure currency (if applicable).

1.1.13.2.10.3. Review MVAC, MIFRAC, Diverse Departure/Diverse Vector Areas, IAPs, STARs, and SIDs to ensure development complies with current standards and correct obstacle assessments have been applied.

1.1.13.2.11. This review will be documented and a copy forwarded to parent MAJCOM NLT 15 September in the applicable year.

NOTE:

RCS code for paragraph 1.1.13.2.9 covers this reporting requirement. See AFMAN 11-230 paragraph 1.3.2.1.

1.1.13.2.12. Complete FAA Form 8240-22, *Facility Data Sheet,* IAW FAAO 8240.36, *Instructions for Flight Inspection Reporting*.

1.1.13.2.13. Prepare FAA Form 6050-4, *Expanded Service Volume Request,* as required.

1.1.13.2.14. Review and document that procedural data in each new FLIP product is correct (See AFMAN 11-230, paragraph. 2.8.1).

1.1.13.2.15. Provide notification of instrument procedure revisions to wing civil engineering and airspace management to ensure compatibility with the Air Installation Compatible Use Zone (AICUZ). Provide information to the CATCT/CSE for controller training and ready-reference file update.

1.1.13.2.16. Review and comment on FAA Form 7460-1, *FAA Notices of Proposed Construction or Alteration,* for affects on instrument procedures.

1.1.13.2.17. Accomplish and submit a Request for Environmental Impact Analysis, if required, IAW AFI 32-7061, *Environmental Impact Analysis Process,* in conjunction with each new, or revised instrument procedures.

1.1.13.2.17. (AFMC) Revised procedures requiring environmental assessments are those in which the ground track and/or altitudes are changed.

1.1.13.2.18. Ensure instrument procedures data requiring NOTAM action is provided to Airfield Management.

1.1.13.2.19. Assist Facility Chief Controller in development of Video Mapping, and Programmable Indicator Data Processor (PIDP) submissions.

1.1.13.2.20. Attend Base Airfield Operations Board meetings.

1.1.13.2.21. The primary TERPS NCO will provide training and task certification support for the alternate TERPS NCO (ATERP). The primary TERPS NCO should involve alternate TERPS NCO(s) in projects to ensure proficiency and project continuity.

1.1.13.2.22. The primary TERPS NCO must coordinate the ATERPS activities with the CCTLR.

1.1.14. Chief, ATC Training and Standardization (TSN):

1.1.14.1. Qualifications.

1.1.14.1.1. Must hold AFSC 1C191 or 1C171 and have performed duties in AFSC 1C1X1 for at least 5 years (not including instructor duty).

1.1.14.1.2. Must be facility-rated, including coordinator positions, in all facilities (except at short tour locations), before assuming duties, and maintain proficiency/currency. At short tour locations the TSN will maintain proficiency/currency in the most complex facility. An assistant TSN (CTO examiner when appropriate) must be available to perform certifications and ratings in the facilities in which the TSN is not rated.

1.1.14.1.3. Must complete the CSE and CATCT portions of the AFJQS 1C1X1-002 and the CSE and CATCT sections of AT-M-04, TSN Task Certification Guide within 9 months of initial assignment to a TSN position.

1.1.14.1.4. Attendance at Instructional Systems Designers (ISD) Course, #J3AZR3S200, is recommended. See AFCAT 36-2223, *USAF Formal Schools,* for enrollment procedures.

1.1.14.2. Responsibilities.

1.1.14.2.1. Works directly for the AOF/CC.

1.1.14.2.2. A TSN serves in the capacity of a CATCT and CSE where only one 1C1X1 position is authorized. The TSN assumes the responsibilities of the CATCT and CSE as indicated in paragraphs 1.1.5.2. and 1.1.7.2.

1.1.15. Airfield Management Quality Assurance Evaluator (QAE): The QAE works directly for the AOF/CC and monitors Airfield Management contracted operations. ***NOTE***: See AFI 13-213, *Airfield Management*

1.2. Non-UMD Positions. The following additional duty responsibilities are described, although they have not earned a full time (funded) manpower authorization. Standardized implementation of these duties is crucial to the successful operation of the Airfield Operations Flight.

1.2.1. Assistant Chief Controller:

1.2.1.1. Qualifications.

1.2.1.1.1. Must be a 1C191 or 1C171, facility rated, WS qualified, and maintain proficiency.

1.2.1.1.2. Must complete the CCTLR portion of the AFJQS 1C1X1-002 and AT-M-05, CCTLR Task Certification Guide within 6 months of initial assignment to the ACCTLR position.

1.2.1.1.3. The facility CCTLR will determine whether an assistant CCTLR is required. Selection will be based on overall qualifications for the position and not solely on rank.

1.2.1.2. Responsibilities.

1.2.1.2.1. Assist the CCTLR in the internal operation of the ATC facility. Specific responsibilities will be placed in writing by the facility CCTLR.

1.2.2. Air Traffic Control Training Device System Administrator (TDSA):

1.2.2.1. Qualifications.

1.2.2.1.1. Must hold AFSC 1C171 or 1C151 and have performed duties in AFSC 1C1X1 for at least two years. Must complete the TDSA portion of AFJQS 1C1X1-002 within 6 months of initial assignment to the TDSA position.

1.2.2.1.2. Must be facility-rated (except at short tour locations) before assuming duties; must maintain proficiency.

1.2.2.1.3. Must have a working knowledge of MS-DOS and WINDOWS applications or complete this training prior to performing TDSA duties. Training may be provided by the wing small computer shop or other viable computer training source.

1.2.2.2. Responsibilities.

1.2.2.2.1. Assist the CATCT in developing and managing the unit air traffic control training device (ATCTD) radar simulator system.

1.2.2.2.2. Build and maintain sector and scenario simulation products, as described in chapter 6.

1.2.2.2.3. Train unit controllers on the use of the ATCTD, as described in chapter 6.

1.2.2.2.4. Develop an ATCTD continuity folder that is available to all users. At a minimum, include the following:

1.2.2.2.4.1. Complete list of all ATCTD scenarios. Include a description (objective) of each scenario.

1.2.2.2.4.2. Current copy of the ATCTD users manual.

1.2.2.2.4.3. Worksheet to track hardware/software malfunctions.

1.2.2.2.4.4. Description of terminal labeling system.

1.2.2.2.4.5. All coordination documentation pertinent to the ATCTD (i.e., emails, memorandums)

1.2.2.2.4.6. Appointment letters and duty description (TDSA and ATDSA).

1.2.2.2.4.7. Other information pertinent to ATCTD.

1.2.2.2.4.8. Specify duties/responsibilities of Assistant TDSAs (ATDSA) in writing.

1.2.3. Assistant Chief, Air Traffic Control Training (ACATCT):

1.2.3.1. Qualifications.

1.2.3.1.1. Must hold AFSC 1C191 or 1C171 and have performed duties in AFSC 1C1X1 for at least 5 years.

1.2.3.1.2. Must complete the CATCT portion of the AFJQS 1C1X1-002 and the CATCT section of AT-M-04, TSN Task Certification Guide within 6 months of initial assignment to the ACATCT position.

1.2.3.1.3. Must be facility rated in the facility where they provide ACATCT support.

1.2.3.2. Responsibilities. Responsibilities will be placed in writing by the CATCT.

1.2.4. Assistant Chief, Standardization and Evaluation (ACSE):

1.2.4.1. Qualifications.

1.2.4.1.1. Must hold AFSC 1C191 or 1C171 and have performed duties in AFSC 1C1X1 for at least 5 years.

1.2.4.1.2. Must complete the CSE portion of the AFJQS 1C1X1-002 and the CSE section of AT-M-04, TSN Task Certification Guide within 6 months of initial assignment to a ACSE position.

1.2.4.1.3. Must be facility rated in the facility where they provide ACSE support.

1.2.4.2. Responsibilities. Responsibilities will be placed in writing by the CSE.

1.3. Certification/Rating Requirements for AOF Officers:

1.3.1. The following are minimum requirements to ensure AOF officers remain current on facility operating responsibilities. AOF officers are encouraged to obtain/maintain facility ratings or additional certifications to increase their technical expertise and knowledge of the air traffic system.

1.3.1.1. When AOF officers have less than six years ATC experience (starting with their date of graduation from the Officer's Training Program, or if prior enlisted, graduation from ATC technical training; any assignment out of the unit level does not count toward the six years):

1.3.1.1.1. AOF officers assigned at locations with both tower and radar approach control facilities must obtain one certification each in a radar approach, radar assist, and the local control positions.

1.3.1.1.2. AOF officers assigned at locations with tower and ground controlled approach (GCA) facilities must obtain local control, radar assist, and radar final control (RFC) position certifications.

1.3.1.1.3. AOF officers assigned at locations with tower and RFC facilities must obtain local control and RFC position certifications.

1.3.1.1.4. AOF officers assigned at locations with only a control tower must obtain a full facility rating in the tower.

1.3.1.2. After completion of facility certification requirements at their respective locations, AOF officers must:

1.3.1.2.1. Maintain proficiency in all required control positions, as specified above.

1.3.1.2.2. Monitor or work various other control/operating positions in all airfield operations facilities (ATC and base operations) for at least 12 hours total per month. ***NOTE:*** Proficiency time may be counted toward the 12 hour requirement. Insure this time is documented in facility logs.

1.3.1.3. AOF officers with over six years ATC experience (as defined in paragraph 1.3.1.1.) must monitor or work various control/operating positions in all airfield operations facilities (ATC and base operations) for at least 12 hours total per month. Insure this is documented in facility logs.

1.4. Hours of Duty. CCTLRs must comply with the following when scheduling air traffic controllers for duty.

1.4.1. A normal scheduled shift should be 8 hours and will not exceed 10 hours. A scheduled off-duty period of at least 12 hours total must occur between shifts. When unforeseen events prevent staffing a facility as scheduled (emergency leaves, Duty Not Involving Controlling (DNIC), or other unexpected loss of personnel), controllers may return to duty with only 8 hours between shifts.

1.4.2. Duty time begins with the first scheduled duty, either ATC or non-ATC, and ends with the last ATC duty. Once duty time begins, controllers have a 12-hour window in which they may work a maximum of 10 hours of ATC duty or ATC and non-ATC duty combined. After 10 hours of duty or at the end of the 12-hour window, controllers must not perform ATC duty. A 12-hour uninterrupted break (8 hours when unforeseen events occur) must occur before the controller next performs ATC duty. Controllers must have at least 24 hours off duty, uninterrupted, after six consecutive days of duty.

1.4.3. MAJCOM and Numbered Air Force (NAF) commanders may direct 12-hour surge shifts only at locations outside the National Airspace System (NAS), where required to support contingencies or exercises. When using surge shifts, controllers must have a 12-hour uninterrupted rest period between shifts.

1.4.4. Consider standby time as ATC duty time. Do not consider on-call time or preduty familiarization time when computing ATC duty time. ***NOTE***: Standby time is when controllers are at their duty location (RAPCON, Tower, GCA, etc.) but not in the IFR room or tower cab. On-call time is when controllers are at their residence awaiting instructions on when to report for duty.

1.5. Facility Staffing. Staff each air traffic control facility with the following minimums:

1.5.1. Control tower, GCA, or RFC: One watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and one qualified controller (Thule and Soto Cano need one watch supervisor qualified controller only) or civilian equivalent (GS 2152 Terminal). A Control tower, GCA, or RFC may operate with only one watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) during mid-shifts or other than published operation hours.

1.5.2. RAPCON: One watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and two (one for Thule AB) qualified controllers or civilian equivalent (GS-2152 Terminal). RAPCON without PAR function, one watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and one qualified controller or civilian equivalent (GS-2152 Terminal).

NOTE:

All units must ensure additional controllers are on duty, as required to cover periods of increased traffic.

1.5.3. Only qualified controllers may work in a position without a trainer/monitor.

1.5.4. Only trainer qualified controllers may train or monitor a trainee. Additionally, they should not train and must not monitor more than one trainee at a time. Trainers and monitors must maintain direct supervision while assigned to an operating position.

1.5.5. Only personnel, to include host-nation and sister service (USN, USMC, etc.), who have successfully completed basic ATC technical training may issue control instructions to aircraft or be assigned to an operating position.

1.5.6. All active duty MAJCOMs will have a supplement to AFI 13-203. As a minimum it must contain manning requirements by facility. Format as follows:

Base

Weekday/ Facility # of positions required Hours required

Weekend

Example:

Canyon AFB

Weekdays	Tower	4 positions	16 hours
		2 positions	8 hours
	Rapcon	7 positions	12 hours
		5 positions	6 hours
		3 positions	6 hours
Weekends	Tower	3 positions	8 hours
		2 positions	8 hours
	Rapcon	5 positions	12 hours
		3 positions	4 hours

1.5.6. (AFMC) AOF/CCs will provide HQ AFMC/DOAC the position information about their facilities for publication in AFMC Sup 1 to include:

- Weekdays - Each facility's specific positions and specific number of hours required to be staffed.
- Weekends - Each facility's specific positions and specific number of hours required to be staffed.
- NOTE "As Needed" will not meet this requirement. AOFs will notify AFMC/DOAC immediately when these staffing requirements permanently change.

1.5.6.1. (Added-AFMC) See Attachment 19, AFMC Individual Base Facility Staffing Requirements.

1.5.7. Air traffic control personnel are shift workers, and must adhere to crew rest requirements. Core manpower authorizations in Air Force Manpower Standard (AFMS) 13E1 do not allow for personnel to support outside taskings such as base details, augmentees for base exercises, etc.

1.5.8. (Added) Emergency Staffing Level (ESL):

NOTE:

Does not apply to ANG locations. ANG/DOB will ensure that a program is in place to monitor ANG staffing levels.

1.5.8.1. The ESL represents the minimum number of qualified controllers necessary to provide normal ATC services without degradation of safety. It prevents over-extension of the available controller force during periods of degraded staffing. Units may operate a facility at ESL not longer than 60 days.

1.5.8.1.1. Units will provide ESL forecasts to their MAJCOMs based on PCS, TDY, DNIC, etc. The MAJCOMs shall determine how often units provide the forecasts (monthly, quarterly, etc.) and how much notice the units will give the MAJCOMs prior to reaching ESL (30 day, 60 days, etc.).

1.5.8.2. Base ESL computation on absolute minimum position staffing per shift, per complex, to provide services advertised. Units will send ESL computations for each complex to the MAJCOM OPR for ATC for validation each year. If variances exist to authorized manning, address them with the computed figure. MAJCOMs will advise each unit of total seven- and five-level validated requirements. The following stipulations apply:

1.5.8.2.1. One seven-level per shift unless a variance justifies additional requirements.

1.5.8.2.2. Use a SC concept for all facilities where possible.

1.5.8.2.3. During known low traffic periods (swing, mid, weekend and holiday shifts), consider combining positions to reduce the number of controllers on shifts to afford adequate controller staffing during normal flying periods.

1.5.8.2.4. Do not consider positions authorized in FAC 13E100, 13E125, and host-nation controllers when computing ESL.

1.5.8.3. When the number of qualified controllers reaches or drops below ESL the OSS/CC, or equivalent, should pursue one or more of the following options:

1.5.8.3.1. Recall qualified controllers from base and organizational duties.

1.5.8.3.2. Curtail certain peripheral ATC services, such as multiple precision radar approach capability, monitoring approaches during visual meteorological conditions, etc.

1.5.8.3.3. Combine positions of operation where possible.

1.5.8.3.4. Increase controller duty hours.

1.5.8.4. Before taking any of the above actions AOF management will schedule dual-certified personnel from other facilities, the facility chief controller, and all other personnel in FAC 13E100 (except the AOF/CC) who hold certifications to work in the affected facility. The first day of the 60-day period begins after assigning all qualified controllers to the affected facility.

1.5.8.5. MAJCOMs must make every effort to resolve ESL problems with MAJCOM resources before requesting help from AFPC. If personnel actions taken have not alleviated the adverse conditions, and the facility remains at ESL (when using the above personnel) at the end of the 60-day period, reduce services and or hours.

1.6. Maintenance Support. The Operations Group Commander (OG/CC) stipulates the response time of ATCALS maintenance personnel to primary and backup equipment outages. The commander responsible for ATCALS maintenance will ensure qualified maintenance personnel are available to support the flying mission. The AOF/CC must coordinate restoration policies with the OG/CC. Coordinate with FAA facility managers, and civil airport managers, when Air Force ATCALS facilities are part of the National Airspace System (NAS). Define restoration policies in a letter of procedure (LOP).

1.7. Duty Limitations.

1.7.1. Air traffic controllers must meet physical qualifications according to AFI 48-123.

1.7.2. Personnel may perform ATC duties even though they are taking innocuous medication, such as aspirin derivatives, vitamin preparations, nose drops, and skin ointments.

1.7.3. Personnel ordinarily assigned to an operating position, including those who directly supervise within the facility, shall not use the types of drugs listed below within a 24-hour period before assumption of duty unless a waiver is obtained:

- Sedative type drugs.
- Tranquilizers.
- Any drugs, such as but not limited to, antihypertensive agents or duodenal ulcer medications, which have an effect on the central autonomatic nervous system.
- Any other drug and/or medication likely to affect the alertness, judgment, vision, equilibrium, or state of consciousness.

1.7.4. Controllers shall not be assigned ATC duties for at least 8 hours after donating blood (formal flight surgeon restriction not required). ***NOTE*:** Controllers shall coordinate with the CCTLR prior to giving blood to ensure duty schedule integrity.

1.7.5. Controllers receiving medical or dental treatment, or immunizations that could affect duty performance must be cleared by the local flight surgeon before performing ATC duties (see restrictions listed in paragraph 1.7.3.).

1.7.6. Personnel must not perform ATC duties, nor directly supervise other controllers, while under the influence of alcohol or within 12 hours of consuming any amount of alcohol. ***NOTE***: If alcohol is used during off-duty time, it should be conservative so an individual's efficiency is not reduced by the after effects ("hangover") of alcohol. Abstinence 12 hours before commencing ATC duties does not guarantee a zero alcohol blood level when large amounts are consumed.

1.8. Consolidating Positions. Assign personnel to positions as required by activity, equipment, and facility function. Consolidate positions only after considering activity and qualifications of the personnel involved (see requirements in paragraph 1.5.6.).

1.8.1. CCTLRs must define procedures for consolidating positions in an LOP.

1.9. Operating Initials. Controllers will be assigned two-letter operating initials to identify them for record purposes. Unless signatures are specifically requested, controllers use assigned operating initials for all operating forms, interphone contacts, marking of recorder tapes, cassettes, digital audio tapes (DAT), and other records. A list of controller initials will be maintained by the CCTLR. *NOTE*: Duty rosters with name and initials can meet this requirement.

1.10. Local Operating Procedures. (Letters of Agreement, Operations Letters, Operating Instructions, Operations Plans (Oplan), and Base Directives). (See Attachment 16 for required LOPs and base airfield operations instruction items).

1.10.1. Each regulatory instruction issued to an ATC facility must be in a letter of agreement, operations letter, operating instruction, base manual or instruction, or OPlan. Temporary instructions, written or verbal, expire in 120 days.

1.10.2. Send local operating procedures, except administrative and facility operating instructions which address administrative matters only, to host MAJCOM OPR for ATC for approval before publication. This review ensures local directives follow United States, host nation, and Air Force ATC policy. Combat communications units have approval authority when deployed in support of tactical operations. Include MAJCOM in distribution of final documents.

1.10.3. Revise, not completely rewrite, letters of agreement and operations letters as follows:

1.10.3.1. Process revisions as complete page changes.

1.10.3.2. Mark a revised paragraph or section with an asterisk to signify new material.

1.10.3.3. The letters “Rev” and the effective date of the revision are in the lower right hand corner of each revised page.

1.10.3.4. Each copy of the original document has the change posted on it.

1.10.3.5. Coordinate and process the same as for the original letter.

1.10.4. Use a pen-and-ink change to delete material or to write in a word or reference to another directive. Do not issue a pen-and-ink change to correct punctuation, misspelled words, or minor typing errors that do not affect the meaning of the text. Keep pen-and-ink changes to a minimum. Rewrite or revise, within 12 months, letters between Air Force agencies that have pen-and-ink changes.

1.10.5. Letters of agreement are written between Air Force units or agencies on a particular base and a non-Air Force agency from the base, or any unit or agency from another location. Prepare letters of agreement between the Air Force and a host country, between centers and terminal radar facilities, between towers and terminal radar facilities, or between facilities on different bases to:

1.10.5.1. Delegate areas of jurisdiction and specify condition of use.

1.10.5.2. Define interfacility or interagency responsibilities and coordination.

1.10.5.3. Describe special operating conditions or add to established instructions.

1.10.6. The MAJCOM OPR for ATC coordinates, reviews, and approves ATC letters of agreement between the Air Force and host country. Establish procedures in MAJCOM supplements to this instruction (AFI 51-701). The AOF/CC and OG/CC prepare, coordinate, and send letters of agreement to MAJCOM for approval.

1.10.7. The following people will sign letters of agreement: OG/CC, commanders of Air Force units that are party to the agreement, FAA or host-nation ATC officials, or responsible officials of other organizations that are party to the agreement.

1.10.8. Prepare operations letters between ATC facilities, or between an ATC facility and another Air Force base agency to:

1.10.8.1. Supplement operational or procedural instructions.

1.10.8.2. Standardize operations.

1.10.8.3. Describe special operating conditions or ATC procedures that are peculiar to a certain location.

1.10.9. AOF/CCs ensure preparation, coordination, and approval of operations letters.

1.10.9.1. The following people will sign operations letters: The AOF/CC, the wing, base, or squadron individuals who have an interest in, control the operation, or receive the ATC service.

NOTE:

The AOF/CC signs when procedures are applicable only to US Air Force AOF facilities on the same base.

1.10.10. CCTLRs issue operating instructions to regulate and standardize administrative practices within a facility. AOF/CCs issue operating instructions to regulate and standardize practices of more than one facility under their jurisdiction. Number operating instructions according to the subject series.

1.10.11. Wing and Base ATC directives:

1.10.11.1. An ATC instruction provides a source document for local ATC situations and procedures. (See paragraph 10.5.4. and attachment 16).

1.10.11.2. An ATC annex in an OPlan usually pertains to specific situations, such as anti-hijack procedures or the wartime role of ATC facilities. An OPlan annex may contain procedures outlined in controller and aircrew directives.

Special Experience Identifiers (SEIs). The following are applicable ATC SEIs: **053** (GCA), **054** (GCA WS/SC), **055** (Control Tower WS/SC), **056** (Control Tower), **350** (Airspace Management), **361** (TERPS), **362** (RAPCON WS/SC), **364** (RAPCON), **365** (RFC), and **900** (Combat Airspace Manager). See AFMAN 36-2108, *Airman Classification*, for SEI description.

PART 2

OPERATIONS

Chapter 2

EQUIPMENT AND OPERATING PROCEDURES

2.1. Hours of Operation. OG/CC specifies air traffic control (ATC) facilities' hours of operation. AOF/CC will set up procedures for opening and closing facilities that operate less than 24 hours a day, 7 days a week. Include these procedures in a LOP coordinated with the ATC facility that has IFR jurisdiction. Facilities that do not operate 24 hours a day must publish their hours of operation in flight information publications.

2.1.1. The OG/CC may authorize standby hours instead of staffing the GCA or RFC facility continuously. Outline response time requirements, periodic equipment checks, and notification methods in a LOP.

2.1.2. OG/CC may extend operating hours at bases where facilities are open less than 24 hours, as required, to meet short-term mission requirements. The CCTLR will ensure crew rest requirements and appropriate NOTAM action is taken.

2.1.3. OG/CC is the approval authority for temporary closures (less than 72 hours) of ATC facilities. Approval shall consider prior coordination with all system users and responsibility to the National Airspace System. Units will telephonically advise MAJCOM of temporary facility closures.

2.2. Equipment Checks.

2.2.1. CCTLR must define procedures for periodic checks of all equipment including after a power failure and generator changeover.

2.2.2. CCTLRs will ensure detailed equipment checklists are developed for use by the on-coming watch supervisor/senior controller.

2.2.3. Watch supervisors must verify equipment outages daily with Job Control. Document completion of the checklist on AF Form 3616, **Daily Record of Facility Operation.**

2.2.3.1. Checklists will be started at the beginning of each shift, and completed as soon as possible. The CATCA must define procedures for periodic checks and monitoring of all automated equipment for use by the automation workcenter.

2.3. Facility Clocks. A reliable clock showing hours, minutes and seconds must be visible from each control position. Facilities without a direct coded time source must obtain a time check every 8 hours. Acquire time checks from IFR facilities equipped with a coded time source, any one of the standard frequency radio time stations listed in FAAO 7210.3, the US Naval Observatory (DSN 762-1401), or the radar facility that provides approach service. Check clocks immediately after the facility goes on backup power and again 30 minutes after. If found to be inaccurate, check clocks hourly until restoring normal power.

2.4. Wind Information. Issue wind direction and speed from wind displays. When wind displays are unavailable, issue wind information contained in the latest weather sequence, prefaced with the term ESTIMATED. Inform the pilot of all changes in wind direction of 30 degrees or more when the wind speed is 10 knots or more. For FMQ-13 indicators, read from the second line of windows on display and issue wind as variable. Example: WIND TWO TWO ZERO, VARIABLE TWO FIVE ZERO, AT ONE FIVE. If wind speed fluctuations are observed, issue wind gusts that exceed the average wind speed by five knots or more. Always include wind direction, and both the predominant wind speed and upper extreme of the fluctuation. Example: WIND TWO TWO ZERO AT ONE-FIVE, GUST TWO-SEVEN. For FMQ-13 indicators, use the GUSTS display to obtain wind gusts. Issue GUST SPREAD (difference between wind speed lull and wind speed peak during preceding one minute) only if specifically requested by the pilot. For FMQ-13 indicators, use the GUSTS SPREAD display to obtain this value. Example: GUST SPREAD TWO-THREE."

2.5. Weather Equipment Warning Devices. Equip automatic weather displays (e.g., Automated Weather Distribution System (AWDS), closed circuit television, electrowriter, etc.) with either a visual and/or aural alarm system suited to local operational needs. Facilities with multiple weather displays need only have the alarms operational at one position.

2.6. Emergency Warning and Evacuation Alarms. Install emergency warning and evacuation alarms in each GCA, MRAPCON, and RSU located 750 feet or less from the runway centerline, or less than 1500 feet from the end of the runway. Runway Supervisory Units (RSU) and Runway Monitoring Units (RMU) are exempt, if immediate communications exist between the control tower and the RSU or RMU, and an LOP addresses alternate notification procedures. *NOTE*: MAJCOMs and/or local units may supplement this paragraph to require that any shelter within the above dimensions have alarms.

2.6.1. An RSU must be able to activate the warning system the same as a control tower.

2.6.2. The tower controller activates position "A" of the alarm switch when an emergency aircraft is approaching to land and for any other condition hazardous to people on the ground. This alerts all sites connected to the system to evacuate, except the GCA, mobile RAPCON (MRAPCON), and RSU. Warn the GCA, MRAPCON, and RSU controllers and maintenance personnel by landline.

2.6.3. If an imminent hazard to the GCA, RSU, or MRAPCON develops, the tower controller immediately activates position "B", which warns all sites. When they receive a warning, personnel not essential to flight safety evacuate. Do not use the position "B" switch if there is time to provide adequate warning by landline.

2.6.4. An activation test will be conducted weekly on the "A" and "B" position. Outline procedures in an LOP. Document results on the AF Form 3616.

2.7. Recorders. Where the capability exists, record by operating position, individual frequency, and landlines as determined by facility managers. Record operating positions in the following priority:

- Precision approach radar.
- Local control.
- Primary crash phone.
- Arrival control.
- Departure control.

- Approach control.
- Coordinator.
- Flight data.
- Assistant controller.
- Clearance delivery.
- Ground control.
- Supervisor of flying (SOF).
- Land Mobile Radio (LMR) nets.
- Automatic Terminal Information Service (ATIS).
- Supervisor.
- Tower backup radios.
- Administrative telephones.

2.7.1. Multi-channel recorders/Digital Voice Recording Systems (DVRS) must have an approved time source installed (e.g. Global Position Satellite). Use one channel to record the time source.

2.7.2. Record pilot-to-dispatch and pilot-to-forecaster frequencies after meeting the requirements of paragraphs 2.7 through 2.7.1. Use remaining channels to record individual frequencies.

2.7.3. (Added-AFMC) CCTLRs with recorder responsibility shall establish procedures for recorder operation. Procedures must identify responsibilities for changing tapes and performing operational checks. Check tapes periodically for wear and recording quality and replace as necessary. Additionally, the responsible CCTLR must establish alternate procedures for recording time when the primary time source is inoperative. Facilities with DVRS or locally purchased recording devices must have procedures that meet these minimum standards in terms that are applicable to those systems.

2.8. Use of Communications. Use ATC frequencies for the transmission of authorized ATC instructions and information.

2.8.1. Personnel must not transmit or permit the transmission of:

- Non-ATC instructions and information, except as in paragraph 2.8.2.
- Obscene, indecent, or profane language.
- False or deceptive communications.
- Willful or malicious interference with other communications.
- Superfluous or unauthorized transmissions, including remarks of a personal nature.

2.8.2. Occasionally it is necessary to transmit a message not directly associated with ATC, but pertains to safety of aircraft operation or preserving life or property. In these emergency situations controllers or non-ATC individuals may transmit such a message. A non-ATC person may transmit this kind of message if:

2.8.2.1. They coordinate transmissions with ATC facilities prior to transmitting.

2.8.2.2. They do not issue ATC instructions.

2.8.2.3. Controllers can interrupt transmissions to continue ATC services.

2.8.3. ATC facilities relay essential non-ATC instructions to aircraft if no other source of communications is available and transmissions do not interfere with the controller's responsibility to prevent collision between aircraft.

2.8.3.1. Commanders must ensure maximum use of pilot-to-dispatcher, operations center, or similar facilities to relay non-ATC information.

2.8.3.2. Relaying distinguished visitor (DV) information is necessary for military protocol. An ATC facility with direct landline capability may relay DV information to a single agency (base operations, operations center, or command post). The ATC facility notifies the agency only once. This duty is secondary to providing ATC services.

2.8.3.3. When an unauthorized agency uses an ATC frequency, make an entry on the AF Form 3616, **Daily Record of Facility Operation**. The AOF/CC will advise the proper base official for appropriate action.

2.9. Landline Operations. ATC facilities must have direct and reliable landline communications with adjacent terminal and enroute facilities and specified base agencies. Each telephone line and landline will terminate in a communications key system in the facility, if possible. A direct landline is a dedicated telephone circuit that terminates in two facilities only, with no access available by another facility. Two-digit ring lines between enroute and terminal facilities meet the above criteria.

2.10. Alternate Communications. Chief controllers must set up interim or alternate communications procedures to use if primary radios or landlines fail. Specify alternate communications procedures in an LOP.

2.11. Radar and Tower Coordination. To ensure proper sequencing of arriving radar traffic, define radar and tower coordination procedures in an LOP. Use an installed radar and tower coordination system as follows:

2.11.1. Flashing White Light. An arriving aircraft has reached a specified point from the runway (normally 15 flying miles):

2.11.1.1. Radar controller activates the flashing white light and furnishes the tower controller with aircraft identification, type, position, type of approach, and type of landing. Facility managers may reduce or modify the information specified to meet operational needs. Specify procedures in an LOP.

2.11.1.1. (AFMC) At tower facilities without a radar/tower coordination system, procedures must be established in an appropriate LOP/LOA that ensures tower controllers receive this information normally 15 flying miles from the runway.

2.11.1.2. Tower controller steadies the white light acknowledging receipt of arrival information.

2.11.2. Flashing Amber Light. An aircraft is (minimum) 7 miles from touchdown or end of runway and the radar controller is requesting tower approval for the aircraft to continue:

2.11.2.1. Radar controller activates the flashing amber light.

2.11.2.2. Tower controller steadies the amber light to acknowledge the position of the aircraft and to approve continuation of the approach to 3 miles.

2.11.3. Flashing Green Light. An aircraft is (minimum) 4 miles from touchdown or end of runway and the radar controller is requesting tower clearance for landing, touch-and-go, option, stop and go, or low approach.

2.11.3.1. Radar controller activates the flashing green light, verbally stating type landing and operating position. State range if other than specified in the LOP.

2.11.3.2. Tower controller steadies the green light and issues a verbal clearance to approve a landing, touch-and-go, option, stop and go, or low approach when the aircraft is (minimum) 4 miles, but not closer than 3 miles, from touchdown or end of runway. The clearance includes field and traffic information if appropriate, and altitude restrictions for a low approach, if required.

2.11.3.3. Radar controller relays the tower clearance verbatim (may simultaneously transmit the clearance to the aircraft and tower).

2.11.4. Red Light. When activated, cancels the clearance for the first aircraft on radar final approach:

2.11.4.1. Tower controller activates the flashing red light when denying or canceling a clearance and furnishes a reason.

2.11.4.2. Radar controller steadies the red light after issuing the clearance denial or cancellation to the aircraft (may accomplish by steadying the red light simultaneously with the transmission of go-around instructions).

2.11.4.3. The radar controller may activate the red light and will verbally advise the tower of a radar-initiated go-around for the first aircraft on final.

2.11.4.4. The flashing red light applies only to the first aircraft on radar final approach.

2.11.5. Establishing Local Procedures and Requirements:

2.11.5.1. The distances from touchdown or end of runway specified for the amber and green lights, are minimum. Adjust distances outward, if necessary, to meet local operating conditions. Specify distances in an LOP.

2.11.5.2. Do not modify the meaning or use of the red light.

2.11.5.3. Define multiple approach, where required, in an LOP.

2.12. Minimum Distance Without Final Clearance. Do not continue an approach closer than 3 miles from touchdown (PAR) or 3 miles from end of runway (ASR) without clearance from the tower controller. The minimum distance also applies to radar-monitored approaches.

2.12. (AFMC) At tower only locations, procedures that ensure this requirement must be contained in LOP/LOA with the radar facility when FAA facilities provide these services.

2.13. IFR Opposite Direction Traffic. Define opposite direction procedures in an LOP. All coordination will include the phrase “opposite direction departure or arrival, runway (number).” In all opposite direction operations, the criteria must not be less than that specified in FAAO 7110.65.

2.13.1. Locations which require opposite direction traffic must define minimum opposite direction cutoff points, distances, or fixes for the following operations:

- Arrival versus arrival

- Arrival versus departure, low approach, etc.

2.13.2. Consider all airfield conditions which may affect opposite direction operations.

2.14. Clearance Delivery. The clearance delivery function must be performed by a controller not actively controlling airborne traffic. ***Exception*:** Clearance delivery may be operated by a controller actively controlling aircraft when facilities are staffed by a single seven level only IAW paragraph 1.5. A clearance delivery position in a RAPCON must have a discrete frequency dedicated to clearance delivery and must not be keyed simultaneously with other frequencies.

2.15. Emergency Frequencies. ATC facilities, except GCA and RFC, must have transmit and receive capability on emergency frequencies 121.5 and 243.0 MHz. Continuously monitor the emergency frequencies during operational hours. When more than one US Air Force ATC facility on a base shares the emergency radio equipment, the tower must have override capability. Tower should have override capability on emergency radio equipment shared with FAA ATC facilities. ATC facilities must have an override capability on emergency radio equipment shared by non-ATC agencies.

2.15.1. ATC personnel will normally handle an unscheduled personnel, emergency, or crash locator beacon signal, as an emergency, regardless of duration. The Wing Commander (WG/CC) may require a lesser level of notification and response and direct ATC not to activate the primary crash alarm system (PCAS). The WG/CC must ensure notification and response procedures are established. If controllers do not activate the PCAS, the ATC facility notifies a single named-base agency and the ARTCC or appropriate host nation equivalent.

2.15.2. Operational testing of a personnel, emergency, or crash locator beacon may not require a response when it is conducted within the first five minutes of the hour and is no longer than three audio sweeps.

2.16. Primary Crash Alarm System (PCAS). Define procedures and conditions for activation in the base airfield operations instruction. Limit agencies with two-way telephones to the control tower, base operations, fire department, and the medical center. Additional agencies may have receive-only capability. The tower PCAS must be a separate telephone instrument with a visual system that activates as each two-way party on the PCAS picks up the handset.

2.17. Land Mobile Radios (LMR). Each LMR system supporting ATC and aerodrome operations must terminate in the control tower console if enough transmitter and receiver selection switches and speakers are available. Each LMR terminating in the control tower must have a selective call feature (electronic, mechanical, or procedural) that enables the tower to mute the radio and eliminate unnecessary transmissions. LMRs tuned to a frequency dedicated to ATC use are exempt from this requirement.

2.18. Airport Lighting Systems. Equip the control tower with the capability to operate airport lighting systems and visual aids. Name an agency responsible for operating the airport lighting when the tower closes. Refer to AFI 13-213, Chapter 6, for additional requirements during tower closures.

2.18.1. When the prevailing visibility is 1 mile or less, or the runway visual range (RVR) is 6,000 feet or less, report changes in the high intensity runway light (HIRL) setting to the weather observer. This ensures the RVR, based on the HIRL setting of 3, 4, or 5, represents the existing RVR.

2.19. Notice to Airmen (NOTAM). The AOF/CC identifies a single ATC facility, in writing, as the NOTAM monitor facility. Set up procedures to ensure notification of air traffic control and landing systems (ATCALS) interruptions and malfunctions to the NOTAM monitor facility.

2.19.1. The AOF/CC must ensure appropriate NOTAMS are sent to protect airspace when the airfield will be open outside of published airfield operating hours.

2.20. Interruptions to ATCALS. The commander responsible for ATCALS must ensure ATCALS are available to support the flying mission. Preventive maintenance (PM) on ATCALS ensures ATCALS perform at an optimum level. When developing a standardized, recurring PM schedule, consider safety, local and adjacent base military and civil flying support requirements, current and forecasted weather, equipment reliability, redundancy and maintenance requirements. The commander responsible for ATCALS maintenance, subject to wing commander approval, specifies a recurring PM schedule. Airfield management submits the base PM schedule for inclusion in the FLIPs.

2.20.1. Before turning a facility over for PM during other than published maintenance periods:

2.20.1.1. Maintenance workers must request approval for the work far enough in advance to allow for coordination.

2.20.1.2. The AOF/CC or representative coordinates the downtime of a facility.

2.20.1.3. Before approving downtime, the AOF/CC gets the approval of the OG/CC and notifies the chief of airfield management for appropriate NOTAM/airfield advisory action. Schedule no more than one ATCALS facility for maintenance at a given time. ***EXCEPTION:*** Multiple ILS facilities installed at opposite ends of the same runway.

2.20.1.4. When an ATCALS component is part of the National Airspace System (NAS), the AOF/CC or designated representative must coordinate with the appropriate ARTCC, FAA terminal radar control (TRACON), and flight service station (FSS). The coordinating agency will ensure appropriate NOTAM action is taken.

2.20.1.5. At multiple base complexes, coordinate schedules so all bases do not remove similar ATCALS from service at the same time.

2.20.1.6. Request planned maintenance shutdown of ATCALS during periods of least activity, including nighttime, as much as possible. If requested PM time is disapproved offer an alternate time.

2.20.1.7. After coordination, the AOF/CC informs maintenance that downtime is approved/disapproved (see para. 2.20.1.4.).

2.20.2. Maintenance workers must coordinate with the affected ATC facility watch supervisor/senior controller before taking ATCALS off the air. Define procedures in an LOP.

2.20.3. Watch supervisors/senior controllers must not allow maintenance personnel to perform work that disrupts or affects the signal of a NAVAID unless the facility is removed from service and the identification feature is turned off.

2.20.4. The AOF/CC will ensure NOTAM action is requested through the appropriate agency.

2.20.5. (Added-AFMC) Reporting ATCALS Interruptions and Malfunctions. The AOF/CC establishes procedures, in a LOP for, reporting ATCALS interruptions, malfunctions, and provide mainte-

nance personnel response times/actions. Report electromagnetic interference to ATCALS according to AFI 10-707, Spectrum Interference Resolution Program.

2.21. Monitoring Navigational Aid Equipment. Monitor each NAVAID facility used for instrument flight. A monitor is an integral part of the facility that automatically transfers transmitters or shuts down the facility when its performance falls below established tolerances.

2.21.1. Designate one ATC facility to be responsible for NAVAID status and install a remote status indicator (RSI) for each NAVAID.

2.21.2. The ATC facility with the RSI informs other facilities of NAVAID status changes. AOF/CC must ensure procedures for coordinating NAVAID status are included in an LOP.

2.21.2.1. At locations where snow accumulation affects the ILS glide slope and causes the RSI to alarm, the WS will attempt to reset and clear the alarm. If unable to reset, immediately call and report the outage. The AOF/CC shall coordinate with NAVAIDs Maintenance and CE to have the snow removed, packed down, etc. Dependent upon the amount of snowfall, a flyability/special flight check may be necessary to determine glide slope angle acceptability. Ensure procedures are covered in a LOP. *NOTE*: See AFI 21-116, *Maintenance Management of Communications-Electronics*, attachment 11.

2.21.2.2. (Added-AFMC) Policy for Correcting Snow Effects on ILS Glide Slopes:

2.21.2.2.1. (Added-AFMC) Theory. The ILS glide slope depends on a smooth level ground plane to properly develop the signal. Three basic antenna configurations compensate for ground plane irregularities: null-reference (NR), capture effect (CE), and sideband-reference (SBR). Snow accumulation has the general effect of raising the ground plane, which causes the glide angle to increase. On NR and CE configurations, the glide slope angle can theoretically increase 0.08 to 0.1 degree per foot of snow for glide angles of 2.5 and 3.0 degrees, respectively. On SBR systems the glide angle can increase from 0.16 to 0.22 degrees per foot of snow, water content, drifting aspects, etc. Under certain rare snow conditions the angle may slightly decrease on SBR configurations. The near field monitor (NFM) is more sensitive to snow accumulation and will alarm and remove the glide slope from service long before affecting the glide angle.

2.21.2.2.2. (Added-AFMC) NR and CE Policy. Remove the glide slope from service when the NFM alarms during or after snow or ice conditions and the ATC facility with the RSI is unable to clear the alarm.

2.21.2.2.2.1. (Added-AFMC) Remove snow or ice from antennas, field detectors, and the NFM reflection area to clear the NFM alarm. The NFM reflection area is that trapezoid area 50 feet wide at the ILS glideslope mast expanding to 87.5 feet wide at the NFM.

2.21.2.2.2.2. (Added-AFMC) The far field glide slope reflection area is that trapezoid area 87.5 feet wide at the NFM to 200 feet wide, 1,000 feet (1,200 feet for glide slope angles less than three degrees) from the glide slope mast in the direction of the middle marker. If this area does not contain abrupt snow banks or drifts, and:

2.21.2.2.2.2.1. (Added-AFMC) The snow accumulation is less than 18 inches and personnel clear the alarm, return the facility to normal service.

2.21.2.2.2.2.2. (Added-AFMC) The snow accumulation is 18 inches or greater in the far field, request a special flight inspection. The glide slope may remain in service, pending the flight inspection, if personnel clear the monitor alarm and local aircraft makes a satisfactory flyability check. The flyability check should determine acceptability of the rate of descent and smoothness of the glide slope during an ILS approach. The special flight inspection must verify glide slope angle and structure. If no problems exist, other than a high glide slope angle, the glide slope may remain in service at the discretion of the Ops Gp/Air Base Wing commander.

2.21.2.2.2.3. (Added-AFMC) Sideband Reference Policy. If the NFM alarms during or after snow or ice accumulation, or if snow accumulates in the glide slope reflection area to one foot or more, remove the glide slope from service.

2.21.2.2.2.3.1. (Added-AFMC) Remove snow and ice from antennas, field detectors, and the NFM counterpoise.

2.21.2.2.2.3.2. (AFMC) The far field glide slope reflection area is the trapezoid area 87.5 feet wide at the NFM to 200 feet wide, 800 feet (1,000 feet for glide slope angles less than three degrees) from the glide slope mast in the direction of the middle marker. If this area does not contain abrupt snow banks or drifts, and:

2.21.2.2.2.3.2.1. (Added-AFMC) The snow accumulation is less than 12 inches and personnel clear the alarm, return the facility to normal service.

2.21.2.2.2.3.2.2. (Added-AFMC) The snow accumulation is 12 inches or greater in the far field area, request a special flight inspection. The glide slope may remain in service, pending the flight inspection, if personnel clear the monitor alarm and local aircraft makes a satisfactory flyability check. The flyability check should determine the acceptability of the rate of descent and smoothness of the glide slope during an ILS approach. The special flight inspection must verify glide slope angle and structure. If no problems exist, other than a high glide angle, the glide slope may remain in service at the discretion of the Ops Gp/Air Base Wing commander.

2.21.2.2.3. (Added-AFMC) Drifting Effects. When abrupt snow banks or drifts exist in the far field, they could affect glide slope structure. Under these conditions, even when the snow depth is less than prescribed limits, conduct a flyability check before continuing operation of the glide slope. Request a special flight inspection or remove or compress the snow in the far field if results of the flyability check are unacceptable.

2.21.2.2.4. (Added-AFMC) Increased Glide Slope Angle or Unacceptable Flyability. If increased glide slope angle or flyability is unacceptable, the Ops Gp/Air Base Wing commander must have the snow removed or compressed in the far field.

2.21.2.2.5. (Added-AFMC) Additional Caution. Complete snow removal in the far field without developing abrupt snow banks.

2.21.3. When an RSI is inoperative or the RSI monitoring facility is unmanned, continue to use NAVAIDs equipped with an internal monitor as long as pilot or maintenance reports show the NAVAID is operating normally.

2.21.4. When the responsible ATC facility is unstaffed, remove from service NAVAIDs without an internal monitor, unless an alternate facility, possibly a non-ATC agency, assumes monitor responsi-

bility. Install RSIs and staff the alternate facility continuously. Define notification and NOTAM procedures in an LOP.

2.21.5. For category (CAT) II ILS facilities, when the RSI fails or the facility with the RSI is unstaffed, even though the ILS is functioning properly, downgrade the ILS to CAT I status.

2.21.6. NAVAID operating hours that are less than continuous must be published in the appropriate FLIP.

2.22. Using Auxiliary Power Generators. Place ATCALS equipment on backup power at least 30 minutes before the estimated arrival of severe weather when the OG/CC has determined that commercial or base power is unreliable and autostart or autotransfer equipment is not available. The OSS/CC will include procedures in an LOP.

2.22.1. Maintenance personnel must get approval from the watch supervisor or senior controller before transferring power at a control tower or radar facility.

2.22.2. Maintenance personnel must get approval from the facility responsible for monitoring NAVAID status before transferring power at a NAVAID and from affected ATC facilities before transferring power at transmitter or receiver sites.

2.23. Multiple Instrument Landing Systems (ILS) Facilities:

2.23.1. ILS facilities installed on intersecting or parallel runways may operate simultaneously, provided the ILS facilities operate on separate, noninterferring frequencies and an operational requirement for simultaneous operation exists. Verify noninterference by FAA flight inspection.

2.23.2. ILS facilities at opposite ends of the same runway must have an interlock to prevent simultaneous operation. Assign distinctly different identifier codes.

2.23.2.1. If the facilities are on common frequencies, assume interference (both glide slope and localizer). Do not disable the interlock to allow simultaneous operation.

2.23.2.2. If the facilities are on discrete noninterfering frequencies and weather conditions are VFR, personnel may bypass the interlock to allow simultaneous localizer and or glide slope operations to accommodate facility installation, maintenance restoration, preventive maintenance, or flight inspection. If a flight inspection discovers interference between localizers and documents the location of interference, permit simultaneous localizer radiation during VFR weather conditions and issue a NOTAM which restricts the facility to the in-tolerance portion of the ILS signal. Example, "RUNWAY 32 LOCALIZER UNUSABLE INSIDE MM or 1.5 DME."

2.23.2.3. AOF/CC must specify conditions for bypassing interlocks in an LOP with maintenance.

2.23.3. Install outer markers serving parallel runways to mark their respective glide slope intercept points. Separate outer markers, whether staggered or abeam each other, enough to prevent interference at glide slope altitudes. If not possible and outer markers interfere with each other, their keyed identification must occur simultaneously by using a single common keyer. Separate operating frequencies by 8KHz (75MHz +/- 4KHz). Locate middle markers according to the requirements of the individual approach.

2.23.4. The chief controller of the facility responsible for NAVAID status must set up procedures to verify the operational status of the inactive ILS at least once daily during a low density traffic period.

2.23.5. Maintenance personnel must get ATC approval before making radiation checks on the inactive ILS.

2.24. ILS Equipment Requirements for Operation. Loss of transmitter or monitor redundancy of either subsystem does not affect the category. Instructions concerning temporary RSI, in paragraph 2.21.3, also apply. If the localizer far field monitor (FFM) becomes inoperative on a Category II system, before bypassing it, send a NOTAM downgrading the ILS to Category I until repair of the FFM. Temporary bypass of the FFM does not affect Category I systems.

2.25. Continuity of Air Traffic Services. OG/CC will determine the need for alternate ATC capabilities to provide continuity of required services during emergency conditions and breakdown or maintenance shutdown of critical system components. Where a need has been established, define procedures in an LOP. The following requirements for alternate ATC facility operations must be addressed:

- UHF/VHF transmitters and receivers.
- Landline communications.
- FM transmitters and receivers.
- Control of airfield lighting.
- Required publications.
- NAVAID monitoring.
- Recording capability
- Receipt of pertinent airfield information (NOTAMs, weather, etc.).
- Coordination with other ATC facilities.
- Control and movement of vehicles during activation and operation of the alternate facility.
- Minimum staffing level.
- Volume of operations (multiple approaches).
- CCTLRs will maintain a fly-away kit for the alternate facility.

2.26. Precision Approach Critical Areas. There are three precision approach critical areas to protect: The localizer (figure 2.1), glide slope, (figure 2.2), and ILS CAT II/PAR touchdown area (figure 2.3). Protect localizer and glide slope critical areas because of possible interference to the ILS/MMLS signal. Protect CAT II touchdown areas from encroachment due to proximity to the landing runway and required obstruction clearance. Establish touchdown areas only when the height above touchdown (HAT) is less than 200 feet for either an ILS/MMLS or PAR approach. An instrument hold line prevents vehicles and aircraft from violating these areas during low weather operations. Markings, signs, and lighting requirements are in AFMAN 32-1076 and AFI 32-1042. The AOF/CC will identify precision approach critical areas in the base flying instruction, ensure the appropriate signs/markings are posted, and develop an LOP to ensure critical areas are protected, as appropriate.

2.26.1. CAT I and II ILS/MMLS Localizer Critical Areas:

2.26.1.1. When the reported ceiling is less than 800 feet or the visibility is less than 2 miles, restrict all aircraft and vehicle operations in the localizer critical area. Do not permit aircraft to

transit the localizer critical area when an aircraft on the ILS/MMLS approach is inside the final approach fix (FAF).

2.26.1.1.1. A preceding aircraft approaching the same runway or another runway may pass through the area while landing, departing, or exiting the runway. Do not allow aircraft to stop within the critical area.

2.26.1.2. When the reported ceiling is less than 200 feet and or RVR 2,000 or less (1/2 mile if no RVR) do not authorize vehicle or aircraft operations in or over the area when an arriving aircraft is inside 1 NM from touchdown (TD).

2.26.2. CAT I and II ILS/MMLS Glide Slope Critical Areas:

2.26.2.1. When the reported ceiling is at or above 800 feet and visibility at or above 2 miles, permit all aircraft to taxi to the runway hold line.

2.26.2.2. When the reported ceiling is less than 800 feet or visibility less than 2 miles, but at or above 200 feet or visibility at or above 1/2 mile (RVR 2,400), restrict all aircraft larger than fighter type size. Do not permit these aircraft to taxi beyond the instrument hold line when an aircraft executing an ILS/MMLS approach is inside the FAF.

2.26.2.3. When the reported ceiling is less than 200 feet or visibility less than 1/2 mile (RVR 2,400), restrict all aircraft and vehicles. Do not permit aircraft to taxi or vehicles to proceed beyond the instrument hold line when an aircraft executing an ILS/MMLS approach is inside the FAF.

2.26.3. Where perimeter roads, access roads, etc., pass through the localizer or glide slope critical area, verify interference or noninterference of vehicles transiting the area. If flight inspection verifies noninterference, retain the flight inspection report and permit vehicles to transit the area. Verify noninterference, by flight inspection, at least every 2 years. If flight inspection verifies interference, take effective measures to overcome the condition or protect the critical area from vehicle operation according to paragraphs 2.26.1 and 2.26.2.

2.26.4. When the reported ceiling is less than 200 feet and or RVR 2,000 or less (1/2 mile visibility if no RVR), do not authorize vehicles or aircraft to be in the touchdown area when an aircraft conducting an approach or missed approach is inside the middle mark (MM) or 1 NM from TD if no MM.

2.26.5. MMLS Critical Areas. Figures 2-4 and 2-5 reflect the azimuth and elevation critical areas. Care must be taken that roads/taxiways do not pass through these areas unless it has been determined that the vehicular traffic will not interfere with the transmitted signal (see paragraph 2.26.3.), or that traffic can be restricted during instrument approach operations. To avoid interference or shadowing problems with taxiing aircraft, the EL antenna should be located on the side opposite the entry taxiway.

Figure 2.1. Localizer Critical Area (GRN 27/29).

Figure 2.1. Localizer Critical Area (GRN 27/29). This rectangular area extends from the localizer transmitting antenna 2,000 feet toward the approach end of the runway and 150 feet on each side of the runway centerline. It includes a 50-foot extension behind the localizer antenna.

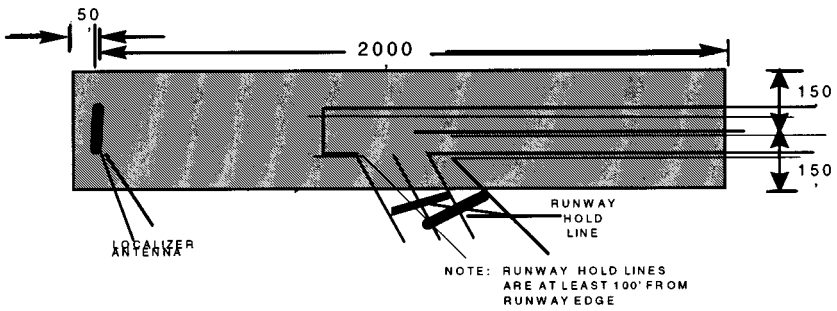


Figure 2.2. Glide Slope Critical Area.

Figure 2.2. Glide Slope Critical Area. This is a fan-shaped area which extends from the glideslope antenna 1,300 feet toward the approach end of the runway (or to the end of the runway, whichever is greater.) It covers an area 40 degrees each slide of a line drawn through the glide slope antenna and parallel to the runway centerline.

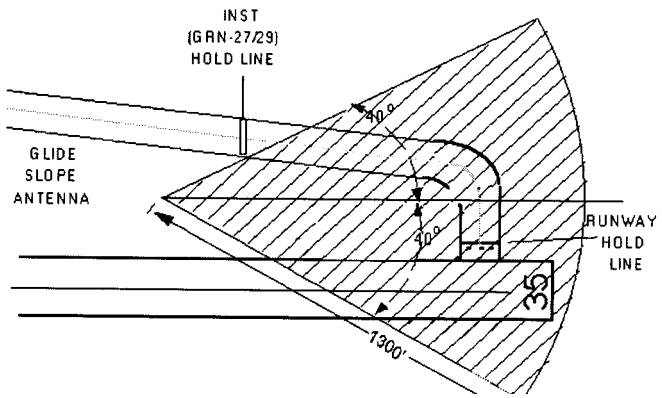


Figure 2.3. Touchdown Area.

Figure 2.3. Touchdown Area. This is a 3,200 foot long by 1,000 foot wide rectangle centered on the runway centerline. It begins 200 feet outward from the landing threshold (normal or displaced) and extends 3,200 feet in the direction of landing. The INST hold line must not be placed closer than 500 feet from the runway centerline when the Touchdown Area applies.

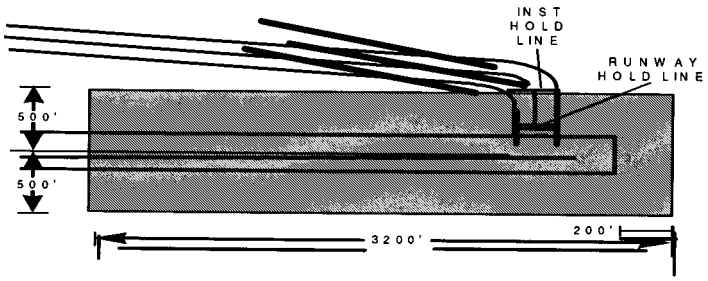


Figure 2.4. MMLS Azimuth Critical Areas.

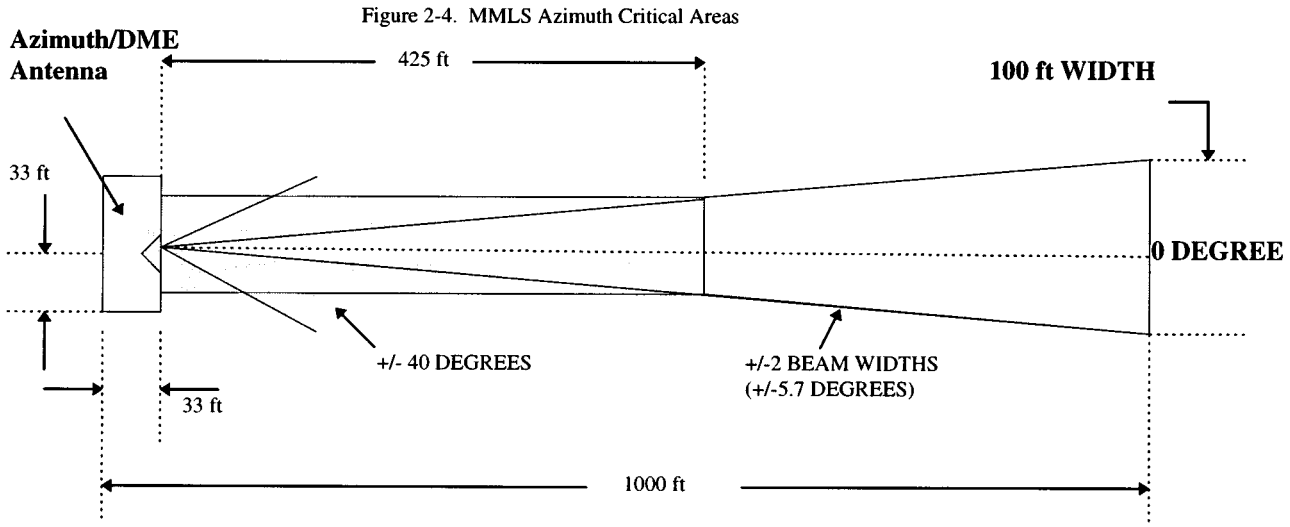
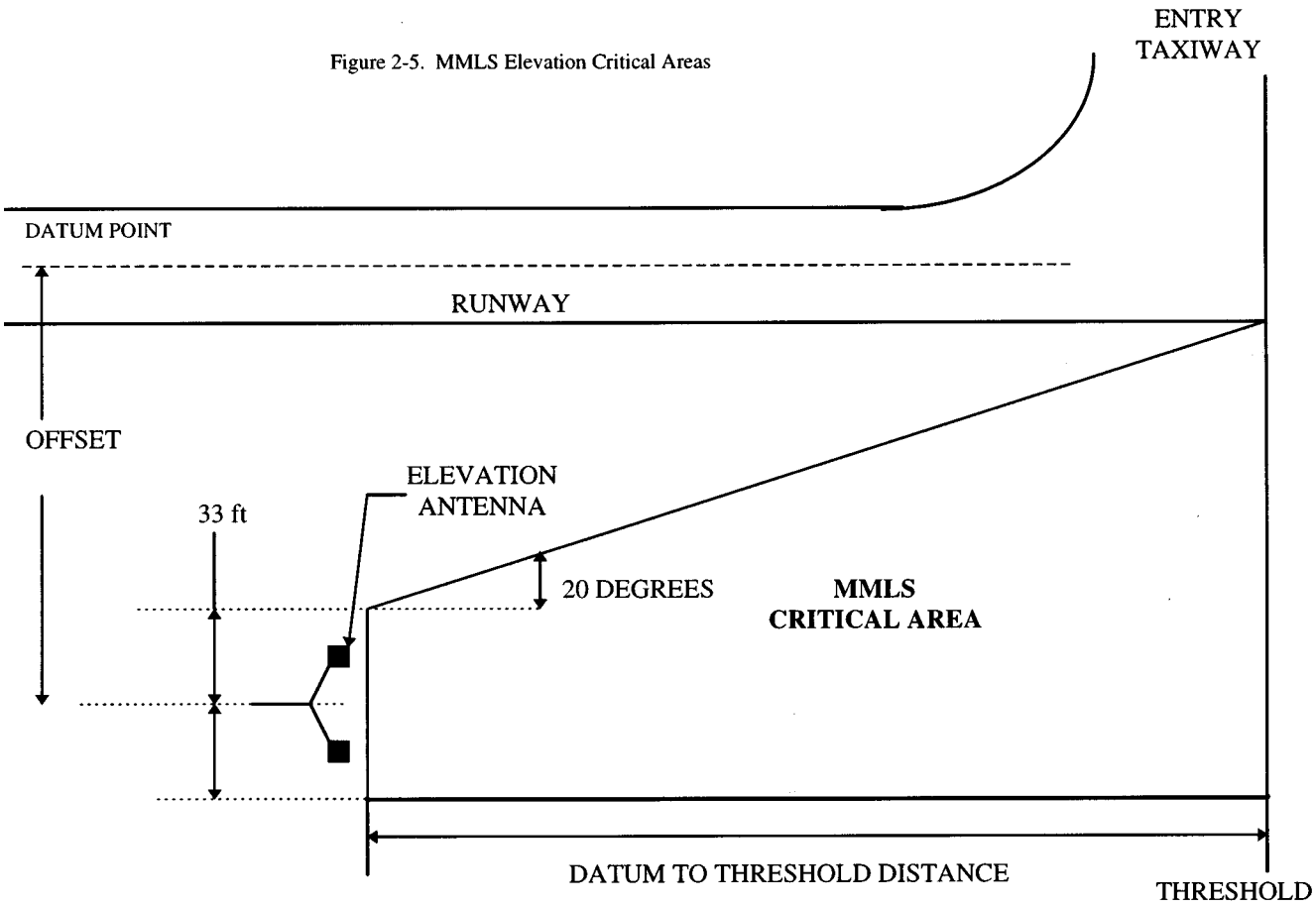


Figure 2.5. MMLS Elevation Critical Areas.



2.27. Automated ATC Systems.

2.27.1. HQ Electronic Systems Center (ESC) OL-D/E is the authoritative source for the implementation, operation, and maintenance of the automated ATC systems they support and maintain (i.e., PIDP, FLIPS, ATCTD, etc.). HQ ESC OL-D/E Operator's Manuals and Version Description Documents (VDD) are directive in nature.

2.27.1.1. Facility CCTLRs will review each PIDP/FDS VDD to determine any operational or procedural impact and, when necessary, issue a facility directive describing the functional or procedural changes. Prior to operational use of a new program update, the PIDP Performance Evaluation Test (PET) will be accomplished indicating the date and individuals performing the tests. If any portion of the test fails, do not initialize the new program until HQ ESC OL-D/E has authorized its use.

2.27.1.2. The FAA is the authoritative source for the software maintenance of the ATC systems they support (i.e., Micro-EARTS, STARS, ETVS, DVRS, etc.). System Operator's Manuals and Computer Program Functional Specifications (CPFS) are directive in nature.

2.27.2. Computer hardware, software programs, and data bases used to provide operational ATC services are mission and life critical resources. Do not tamper with, alter, or use these resources for other than their intended purposes. Load only authorized software programs provided by the system software manager. All personnel share the responsibility for protecting these resources.

2.27.3. Immediately withdraw from service any ATC computer resource suspected of malfunctioning due to tampering, abuse, or introduction of unauthorized programs (i.e., software viruses, etc.). Physically disconnect all interface connections to other computer systems and maintain the suspect computer or software for analysis. Notify the MAJCOM OPR for ATC if this occurs.

2.28. Control Tower Plastic Window Shades. FAA Order 6480.18 directs the use of standard specification FAA-E-2470B for control tower plastic window shades. Local units must use these specifications when ordering replacements.

2.29 Control Tower Cab Windows. Install tower cab windows IAW FAAO 6480.7, attachment 1. Consult the Air Traffic Control Tower design guide for further guidance.

2.30. (Added-AFMC) Cellular Phones. The use of cellular phones in IFR rooms/tower cabs is prohibited, unless for official government business or the use is identified as a means of primary/alternate communications for ATC coordination purposes in an LOP.

2.31. (Added-AFMC) Distractions such as, but not limited to card games, televisions, radios, and video games, are not normally appropriate in ATC control towers and radar facilities.

Chapter 3

CONTROL TOWER OPERATIONS

3.1. Light Guns. Attach a card listing the color codes and meanings contained in FAAO 7110.65 to the back of each gun. Adjust each gun to give a red light when turned on. Do not beam signals through sunshades.

3.1.1. Light gun operational checks must be accomplished at least once per day and when practical with aircraft or vehicles.

3.2. Takeoff or Landing Direction Determination. Control tower personnel determine the runway in use, according to FAAO 7110.65, unless procedures in an LOP delegate this function to another agency. Coordinate with terminal radar facilities before changing the runway in use. Notify the terminal radar facility, base operations, base weather facility, and ARTCC (if appropriate) when the runway change is complete.

3.3. Control of Ground Traffic in Aircraft Movement Areas. The AOF/CC identifies those parts of the movement area where aircraft, vehicles, or pedestrians may operate without tower control. The AOF/CC also sets up procedures to recall personnel and vehicles to a safe distance from a runway or other movement area. Procedures must require direct two-way radio communications with the control tower or one person in the area to look continuously at the control tower for light signals. Ensure there is a procedure in the event of radio failure. Include these procedures in the base airfield operations instruction. To the maximum extent possible, provide positive control on all portions of the movement area (as defined in FAAO 7110.65). Publish exceptions in the base airfield operations instruction and/or enroute supplement.

3.4. Wind Limitations on Control Towers. The base civil engineer must make a structural evaluation of the control tower to determine the maximum wind velocity the tower will safely withstand. Make the evaluation a permanent part of control tower real estate records. The OG/CC sets a maximum wind velocity to guide control tower evacuation plans. The chief controller puts the maximum safe wind velocity and local tower evacuation procedures in an LOP.

3.5. Functional Use of Tower Radar Displays. Use tower radar displays to perform specific functions according to FAAO 7110.65. MAJCOMs may authorize use of tower radar displays for additional functions when a clear operational need exists. MAJCOMs will forward all such approved procedures to AFFSA/XA for review.

3.5. (AFMC) Authorization for towers to provide separation services, using the DBRITE other than those prescribed in FAAO 7110.65 and FAAO 7210.3, shall be supported by a staff study prepared by the requesting facility and forwarded to HQ AFMC/DOA for review. HQ AFMC/DOA will forward request to HQ AFFSA/XA for waiver consideration. The staff study must include the following, as a minimum:

- A determination of operational needs
- Why the associated radar facility cannot satisfy the operational need
- Operational benefits

- Operational impact
- Procedures to be used in the event the DBRITE is inoperative
- Radar training
- Maintenance support/restoration requirements
- Additional staffing requirements
- Concurrence of the OG/CC
- The measures taken to ensure the local controller's ability to satisfy the FAA's air traffic responsibilities regarding aircraft operating on the runways or within the surface area is not impaired.

3.5.1. Facility managers may determine on a case-by-case basis, if the maintenance indicator is adequate to support operations during short-term outages.

3.5.1.1. Do not use the BRITE maintenance indicator on a permanent basis.

3.5.2. BRITE/DBRITE radar displays in USAF control towers are certified radar displays.

3.6. Wear of Sunglasses in Control Towers. Do not wear photogray, polarizing, or photo activated darkening system type sunglasses while performing ATC duties.

3.7. Protection of 360 Overhead Pattern. AOF/CCs at locations which use the overhead pattern must develop local procedures and coordination requirements to protect the overhead pattern. The AOF/CC ensures these procedures and coordination requirements are published in an LOP. Such procedures must not restrict the departing, missed approach, or go-around aircraft to a point or altitude that, once it crosses the departure end of the runway, compromises TERPS obstacle clearance or IFR clearance. Published (flight inspected) IFR TERPS procedures, including missed approach instructions, must not be annotated or restricted to protect the VFR/360 overhead pattern. Where the base airfield operations instruction contains specific climbout instructions to protect the overhead pattern, controllers may use the phrase “EXECUTE LOCAL CLIMBOUT” for locally assigned aircraft only.

3.8. Tower Equipment. Provide each control tower with the following equipment appropriate to assigned mission functions:

- Control Tower console
- Flight progress strip holders
- Landline system
- Radio receiver and transmitter controls
- Tower radar display
- Weather dissemination and display equipment
- Two wind direction and speed indicators
- NAVAID remote status indicators (if required)
- Tower and radar coordination system (if required)
- Two air traffic control light guns
- Two pair of binoculars
- Airfield lighting control

- Runway barrier controls and status indicators (if required)
- Primary crash alarm system
- Radar and NAVAID emergency warning and evacuation alarm system
- Counters for recording traffic
- UHF and VHF emergency/alternate radio systems
- Voice recorders and 31 day supply of magnetic tapes/cassettes
- Battery-operated emergency lighting system or flashlights
- Dedicated communications for tower/radar coordination
- Flight Data System
- Automatic Terminal Information Service (ATIS) (if required)
- RVR equipment for bases with CAT II ILS
- Headsets
- Fly-away kit

3.9. Departure/Arrival Separation. During IMC conditions, cancel automatic releases. In addition, prohibit takeoff or taxi into position and hold clearances when arriving IFR aircraft are four miles or less from the runway, unless visual separation can be applied between aircraft on the runway and aircraft on final.

3.10. Air Force Policy on Class "C" Service. Air Force policy is that Class C service will be provided by the servicing RAPCON, TRACON, or applicable radar agency.

3.11. (Added-AFMC) Repair of Defective Control Tower Glass.

3.11.1. (Added-AFMC) Upon discovering any defective control tower glass, immediately notify the base civil engineer and submit a work order requesting repair or replacement.

3.11.2. (Added-AFMC) If, in the opinion of the AOF commander, the damage constitutes a potential hazard to flight operations, request the base flying safety officer verify the hazard.

3.11. (AFMC) 2.1. (Added) Upon verification, the AOF commander will immediately inform the base civil engineer that a flight safety hazard exists and request glass repair is made in the most expeditious manner.

3.11.3. (Added-AFMC) Make control tower glass problems an agenda item at the first base Airfield Operations Board (AOB) meeting following the damage. Ensure the base AOB monitors the glass problem until repair is completed.

Chapter 4

RADAR OPERATIONS

4.1. Radar Use. USAF ATC radar systems may be used for:

- Surveillance of aircraft to assure the effective use of airspace.
- Vectoring aircraft to provide separation and radar navigation.
- Vectoring aircraft to final approach.
- Vectoring aircraft to the airport of intended landing.
- Monitoring instrument approaches.
- Providing assistance to pilots of aircraft in distress.
- Conducting precision or surveillance approaches.
- Air Base Defense (see paragraph 4.12.).

4.1.1. A facility may remote radar operated by non-ATC agencies and use it for ATC purposes if the radar is satisfactorily flight checked according to AFM 11-225. The non-ATC agency must not alter radar information furnished to the ATC facility without prior notification.

4.1.2. A controller provides radar service when they have a usable target and determine that presentation and equipment performance are satisfactory. A usable target is one where a return is not missed on more than two consecutive scans. Normally, a return should be seen on every scan from the final approach fix to the missed approach point.

4.2. Radar Mapping Requirements. The minimum radar mapping capability for commissioning an approach control service is a dual video mapper, adequate map overlay, or computer generated display. ***NOTE:*** AN/GPA-131 Video Mapper meets the dual video mapper requirement.

4.2.1. Do not use grease pencil markings, plastic tape, compass rose grid lines, range marks or other innovations in place of an adequate map overlay, video map, or computer generated display.

4.2.2. If map overlays are coincidental with a flight inspected video map presentation, they do not need to be flight-inspected.

4.2.3. Verify the accuracy of new or modified digital maps by using “targets of opportunity” over displayed fixes, NAVAIDs, etc. Document discrepancies to indicate deficiencies and request a flight check.

4.3. AN/TPX-42 Strapping. Normally strap the AN/TPX-42 1,000' higher than the transition altitude. The negative 1,000' altitude factor applied between the point of strapping and the point of applying local altimeter correction is an inherent part of the signal-processing chain. At locations with low transition altitudes (below 10,000'), strap the TPX-42 2,000' above the transition altitude. This will reduce the number of incorrect altitude read-outs below the transition altitude during periods of low altimeter settings.

4.3.1. Do not use AN/TPX-42 altitude read-outs for separation between the transition altitude and the transition level. During periods of low altimeter settings (between 28.92 and 27.92), altitude read-outs may be unreliable at altitudes within 1,000' below the transition altitude.

4.3.2. Facilities with programmable indicator data processor (PIDP) equipment do not require strapping.

4.4. Range Azimuth Beacon Monitor (RABM). CCTLRs must provide written guidance for use of the AN/TPX-49A during equipment checks and when verifying beacon range accuracy before providing secondary radar-only service during temporary primary radar outage conditions. Continually display the AN/TPX-49A generated target to verify system accuracy whenever primary radar is inoperative and secondary radar is in use.

4.5. Radar Reflectors for Precision Approach Radar (PAR):

4.5.1. The outage of one bracketing reflector, or the outage of the centerline reflector when a single centerline reflector is being used, does not make the PAR unusable provided a suitable alternate method of runway centerline reference is available (approach lights, runway lights, barrier poles, etc.). CCTLRs will determine which returns to use as a temporary replacement for the bracketing reflectors. Verify accuracy of the alternate references through local or formal flight inspection. After flight check determines accuracy, publish guidance for use in a facility directive. In addition, MTI reflectors must be operational (refer to the appropriate TO for the minimum number required) when conducting PAR approaches using MTI radar. The outage of any one of these reflectors makes the PAR unusable in the MTI mode.

4.5.2. The AN/GPN-22 and AN/TPN-25 do not use bracketing or touchdown reflectors. A track reference reflector monitors elevation accuracy for each runway served. The PAR is unusable if the controller cannot track and identify the reference reflector.

4.6. Radar Glide Path and Course Information. Use the center of the radar target (track symbol for phased array PARs) to determine when an aircraft exceeds the PAR safety limits. Use minimum gain to provide the most accurate position information.

4.6.1. The AN/GPN-22 and AN/TPN-25 use a computer tracking system. Local conditions and equipment performance may limit the use of this equipment to control aircraft without the aid of the tracking system (scan mode only). Commissioning and periodic flight inspections of these radar systems will identify their capabilities and limitations. During temporary loss or nonavailability of the tracking symbology and the controller can verify the radar is otherwise operating normally, the controller may use scan only video to conduct radar approaches provided limitations and procedures are published in an LOP.

4.7. PAR Safety Zones: (figure 4.1)

4.7.1. PAR Lower Safety Limit Zone. A PAR lower safety limit path ("B" cursor) originates between the end of the runway and a point not closer than 500 feet before the runway point of intercept (RPI) of the glide path. Where possible, "B" cursor origin should be at least 250 feet from the runway end. That area between the "B" cursor and the glide path is the safety zone.

4.7.1.1. The "B" cursor extends upward at an angle one-half (0.5) of a degree lower than the commissioned glide path angle, and ends at an altitude of 250 feet below the established glide path intercept altitude.

4.7.1.2. At some locations, the length of the "B" cursor differs because of differences in glide path angles or intercept altitudes for the two runways. When this occurs, use the longer "B" cursor length (termination point below the glide path). Using the common "B" cursor expedites use of PAR by reducing maintenance adjustments after a runway change and equipment turnaround.

4.7.1.3. The AN/GPN-22 "B" cursor extends to the length of the "A" cursor. However, safety limits apply for go-around instructions only between the point on the "B" cursor 250 feet below the established glide path intercept altitude and the normal termination point of the approach.

4.7.1.4. A dashed electronic cursor displays the "B" cursor on the elevation portion of the PAR scope for each precision approach. If an equipment malfunction prevents display of the cursor, a suitable substitute may identify the lower safety limit zone.

4.7.2. PAR Upper Safety Limit Zone. This zone is above the glide path, and its dimensions are the same as those established for the lower zone. The upper safety limit path starts at a point in space above the glide path, and has the same geometrical relationship to the glide path as the lower path. The upper path rises at an angle one-half (0.5) of a degree greater than the commissioned glide path angle. There is no requirement to display the upper path on the scope.

4.7.3. PAR Lateral Safety Limits. These limits refer to distances on the azimuth portion of the PAR scope. There is no requirement to display lateral safety zone limits on the radar scope; however, a drawing or table depicting lateral safe limits must be available at each PAR position. Table 4.1 specifies PAR lateral safety limits and approximate displacement distances. The displacement distances are averages and actual distances will vary. Displacement distances for scan type radar are based on a maximum display range of 9 miles. The displacement relationship remains constant for tracking type radars, regardless of the display range selected (8, 15, or 20 miles). Use these distances as a guide for interpreting the precision radar displays.

Figure 4.1. Typical FPN-62 Elevation Display.

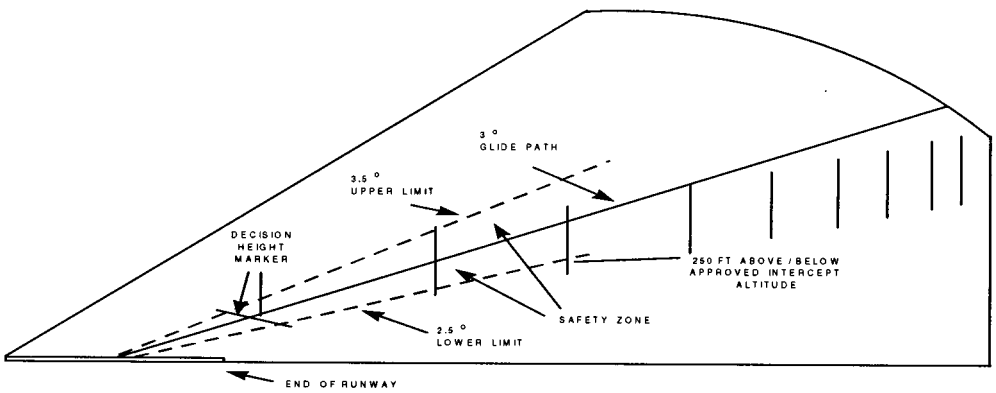


Table 4.1. PAR Lateral Safety Limits and Approximate Displacement Distance.

Range	Lateral Limit	Scan Radars	Tracking Radars
6	1200 feet	3/4 inch	1/2 inch

5	1000 feet	3/4 inch	1/2 inch
4	800 feet	1/2 inch	3/8 inch
3	600 feet	1/2 inch	3/8 inch
2	400 feet	1/4 inch	1/4 inch
1	200 feet	1/4 inch	1/4 inch
1/2	100 feet	1/4 inch	1/4 inch

4.8. Decision Height (DH). Mark the DH on the PAR azimuth-elevation zone paths that represent the height above touchdown (HAT) zone elevation approved for the runway in use. Use grease pencil or fluorescent gummed cellophane tape to display the DH if not electronically displayed. Display only the DH for the runway in use (see figure 4.1).

4.9. Monitoring Instrument Final Approach Courses. To use PAR to monitor nonradar instrument approach courses the PAR final approach course must coincide with the instrument final approach courses from the final approach fix to decision height. Additionally, the PAR runway point of intercept (RPI) must be within 250 feet of the ILS or MLS RPI, and the commissioned flight check angle of the PAR must be within two-tenths of a degree of the ILS or MLS commissioned glide slope angle.

4.9.1. If a facility cannot use PAR to monitor ILS or MLS approaches, publish a caution in the remarks portion of the applicable approach chart in the appropriate FLIP.

4.9.2. Where PAR serves a runway that has an ILS, MLS, or visual glide slope indicator, the glide paths, glide slope angles and RPIs should coincide. An official flight inspection must determine coincidence. At locations where PAR, ILS, MLS, and visual glide slope indicators are not technically coincident according to AFJMAN 11-226 the host MAJCOM must decide whether to comply with the coincidence requirement. Where PAR, ILS, MLS, and visual glide slope indicators are not coincident, publish the deviation in the IFR Supplement. Example: RWY 30-PAR, ILS, and PAPI glideslopes are not coincidental.

4.9.3. When the mission warrants simultaneous approach monitoring the CCTLR will outline procedures in a facility directive. A radar final controller must not monitor more than two aircraft or flights simultaneously (except as noted in paragraph 4.9.5).

4.9.4. A radar final controller must not accept more than one aircraft or flight conducting a precision or surveillance radar approach except as noted in 4.9.5.

4.9.5. DELETE

4.10. Airport Surveillance Radar (ASR) Approach Procedures:

4.10.1. An adequate reference to the runway centerline must be available on the ASR indicator. The video map is an adequate reference when the commissioning flight check establishes permanent echoes or targets. Facilities without a video map must have alignment reflectors to verify course accuracy. Use two runway bracketing reflectors or a centerline runway reflector to verify alignment of an overlay, cursor or compass grid line for ASR approaches. MTI reflectors must be operational when conducting ASR approaches using MTI radar when video maps are not available or when using MTI to determine runway centerline reference.

4.10.2. Facilities must use a video map, if available, to depict the extended runway centerline. Use a map overlay during map outages. Use the electronic cursor in an MPN-14 facility during a video map outage, if the cursor decentering and bearing controls have protective covers.

4.10.3. There is no requirement for bracketing reflectors or a video map to provide ASR approaches using the AN/TPN-19. The system's fixed, displayed runway cursor is based on a set geographic location in relation to the ASR antenna and meets reflector, video map and cursor requirements.

4.10.4. Recommended altitudes for ASR approaches must be developed according to AFMAN 13-209 and be immediately available at each RFC, ASR indicator, and DBRITE (if used for surveillance approaches) position. The minimum descent altitude (MDA) or circling MDA published for the approach procedure is applicable in determining the point at which to discontinue recommended altitudes.

4.11. Radar Performance Checks. Each radar controller is responsible for determining on a continuous basis if the quality of their radar display and video fix accuracy is satisfactory for ATC purposes. Radar quality and performance are determined by comparing identified targets against data obtained during the commissioning flight check or through minimum performance criteria determined jointly by maintenance and the CCTLR. Radar controllers must be familiar with commissioning flight check and minimum performance data. Chief controllers will make this information readily available to the controllers. Aircraft selected for these checks should be small aircraft similar in size to those used during the flight check.

4.11.1. The radar performance check must be accomplished at least once each shift.

4.11.2. Automated ATC narrow-band radar systems shall not be used for operational purposes unless they are operationally validated (certified) by ATCALS maintenance personnel. Unvalidated radar sensors (i.e., failed or out of tolerance) shall be inhibited from the system until validated for use. An entry shall be made on AF Form 3616 when the digitized radar system is validated for operational use and/or when an unvalidated radar sensor is inhibited or restored to the operational system.

4.12. Air Base Defense. If a requirement exists, terminal ATC radar facilities perform radar surveillance functions to support early warning or ensure safe passage of friendly aircraft. The AOF/CC must describe controller priorities and procedures, coordination requirements, and areas of responsibility in an LOP.

4.13. Optimum Antenna Tilt. Operate radar units with variable antenna tilt capability at the tilt angle prescribed by the last official commissioning flight check.

4.14. Surveillance Antenna Operation in High Wind. ATC operations and maintenance will allow the antenna to free-wheel whenever the wind exceeds the maximums defined in the system specific technical orders (TO), and ATC conditions permit. Chief controllers must define procedures in a LOP to notify maintenance personnel when wind forecasts exceed system operational capabilities. Procedures should also specify who is responsible for placing the antenna in the free-wheel mode.

4.15. Minimum Safe Altitude Warning (MSAW) Requirements. Radar facilities that have MSAW/LAAS capabilities will set MSAW/LAAS requirements. A MSAW/LAAS must have visual and aural alarms to alert the controller when the protected track is at or below a predetermined minimum safe altitude. See AFI 13-215, *ATC Radar Maps and Associated Systems,* for MSAW development criteria.

4.15.1. (Added) CCTLRs will ensure an MSAW alarm operational test is accomplished at least weekly and procedures are detailed in their periodic equipment checklists as per paragraph 2.2.

4.16. Low Altitude Alerting System (LAAS) Requirements. Set the altitude for LAAS activation no lower than 200 feet below the MVA unless local procedures require lower activation altitudes (VFR routes, special use airspace, etc.). All LAAS activation altitudes lower than 200 feet below the MVA require approval of the OG/CC. Develop procedures specifying when aircraft may be exempt from LAAS monitoring. These procedures should only allow use of the exempt feature when mission or airspace requirements absolutely dictate.

4.16.1. During wartime deployments and short-notice or emergency taskings, use of the LAAS circuit will be contingent on the availability of the read only memory (ROM) chip.

4.17. Diverse Vector Areas (DVA). Whenever an aircraft executing a departure/climb-out instructions will be vectored below the MVA/MIA, a DVA shall be established (See FAAH 7110.65, Chap 5, Sec 6). DVAs provide reduced separation from obstacles IAW TERPS diverse departure criteria.

4.17.1. When a DVA is established, the CCTLR shall prepare a facility operating instruction describing:

4.17.1.1. A complete description of the DVA, to include any restrictions and/or free vectoring areas. **NOTE:** Free vector areas are areas within a DVA in which random vectoring below the MVA/MIA is authorized.

4.17.1.2. Procedures for radar vectoring IFR departures below the MVA and radar vectoring below the MVA within 3-5 miles of an obstacle.

4.17.1.2.1. Outbound vectoring sectors involving one or more areas.

4.17.1.2.2. Where required, specific radar routes, depicted on the radar scope, along which positive course guidance is provided to aircraft below the MVA/MIA.

4.17.1.2.3. Restrictions to DVAs, caused by other than close-in obstacles, shall be described on either a new or existing video map.

4.17.2. No IFR aircraft climbing within a DVA shall be assigned an altitude restriction below the MVA/MIA. Obstacle avoiding vectors may be discontinued when the aircraft reaches the MVA/MIA or leaves the required obstacle clearance (ROC) altitude, rounded up to the next 100-foot increment.

4.17.3. Headings shall not be assigned beyond those authorized for DVA prior to reaching the prescribed altitude.

4.17.4. If a particular sector or route within a DVA depends on the use of a climb gradient in excess of 200 feet per mile a departure route shall be developed.

4.17.5. Ensure that controllers are familiar with all the provisions of the facility directive before vectoring aircraft in accordance with DVA criteria.

4.18. Designation of Sectors. The facility chief controller develops airspace sectorization based on predominant traffic flows, altitude strata, and controller workload. Ensure no two controllers provide service or advisories in the same airspace.

4.19. Multiple Radar Final Control (RFC) Requirement. The OG/CC specifies the wing's multiple PAR requirement and ensures enough RFC approaches are flown to maintain controller proficiency. Detail the multiple RFC requirement in the base airfield operations instruction.

4.20. Radar Equipment: A radar approach control or other terminal radar ATC facility has the following equipment:

- Flight Progress Boards
- An approved landline system that includes an intercom between positions within the facility.
- An approved radar display
- Radio receiver and transmitter controls and consoles
- Weather dissemination and display equipment
- NAVAID remote status indicators (where applicable)
- Voice recorders and 31 day tape/cassette supply
- Wind direction and speed indicators
- Flight Data System (FDS), with a collocated clearance delivery position that has independent communications.
- Coordinator positions. Authorize independent coordinator positions when necessary due to traffic complexity.
- Secondary radar system
- A radar and NAVAID emergency warning and evacuation alarm system (for facilities located within applicable distance criteria)
- Video mapper and map overlay
- Battery operated emergency lighting systems or flashlights
- UHF and VHF emergency alternate radio system
- Radar and tower coordination system
- Approved Automated Radar Tracking System (PIDP, EARTS, ARTS 3/A, etc.)
- Headsets

4.21. PAR Associated Equipment Requirements. A readily observable and operational ASR display must be available in the operations room at facilities providing PAR only service. At locations where ASR displays are not available, a DBRITE maintenance monitor or television slaved from the tower DBRITE meets the requirement. The ASR display will aid controllers during radar hand-offs between approach control and PAR. When the ASR display is out of service, PAR services may continue if the AOF/CC establishes procedures in an LOP.

4.22. Turn around for ATC radars . CCTLRs will establish notification procedures for personnel working in or around radar units.

4.23. (Added) Center Radar Presentation (CENRAP):

4.23.1. PURPOSE. This guidance prescribes air traffic control (ATC) procedures and phraseology for use by personnel providing ATC services using CENRAP.

4.23.2. DEFINITIONS:

4.23.2.1. CENRAP. A computer program that permits the processing of specified En Route HOST Secondary Target Radar information by the Programmable Input Data Processor (PIDP) and the presentation of this information on the radar position displays. This program is used as a backup system when the terminal radar fails and/or is out of service. CENRAP requires that the PIDP processor be operational.

4.23.2.2. CENRAP-Plus. The process which simultaneously presents CENRAP secondary radar information and terminal airport surveillance radar (ASR) information at the radar display. This process is used when only the ASR secondary beacon radar system fails and/or is scheduled out of service.

4.23.2.3. North Mark. A beacon data block sent by the HOST computer to be displayed by the PIDP on the 360-degree magnetic bearing from the ASR site. The North Mark is used to ensure correct range/azimuth orientation during periods of CENRAP.

4.23.3. BACKGROUND. This document revision incorporates requirements contained in related Federal Aviation Administration (FAA) orders and also includes the guidance contained in GENOT 3/54, Notice 7110.92, dated 7/23/93. CENRAP is a combined software, hardware, and procedures program to provide PIDP facilities with the HOST center radar presentation in the event of terminal radar system failure or nonavailability. It was developed to provide a limited radar environment that allows a more expeditious means of controlling aircraft than utilizing nonradar procedures.

4.23.4. PROCEDURES:

4.23.4.1. CENRAP-Plus. All standard terminal primary target radar separation standards shall apply when in CENRAP-Plus except the use of Mode C altitude readout for vertical separation purposes.

4.23.4.2. CENRAP. The following separation criteria and limitations are intended to provide ATC service during periods of terminal radar failure. It is not intended to increase the level of air traffic services provided beyond that which is provided during normal operations.

4.23.4.2.1. Use vertical separation of 1,000 feet between instrument flight rules (IFR) aircraft, and between visual flight rules (VFR) aircraft when passing below or behind a heavy aircraft or B-757. Use 500 feet vertical separation between VFR aircraft and other VFR or IFR aircraft when heavy aircraft are not involved. The use of Mode C altitude readout for vertical separation purposes is not authorized.

4.23.4.2.2. The following lateral separation may be used in lieu of vertical separation. The lateral separation standard shall apply to all IFR aircraft and all VFR aircraft receiving sequencing and/or separation service.

4.23.4.2.2.1. Five miles radar separation.

4.23.4.2.2.2. Apply all appropriate wake turbulence separation criteria as per Order 7110.65.

4.23.4.3. Provide traffic advisories, workload permitting, and safety advisories to IFR and VFR aircraft when operating in CENRAP. In addition, when sequencing and/or separation services to VFR aircraft are normally provided, the Chief Controller (CCTLR) shall determine if these services can be provided to VFR aircraft without impacting services to IFR aircraft during CENRAP operations. Procedures for providing separation and/or sequencing services to VFR aircraft shall be included in an operating instruction if it is determined these services will be provided.

4.23.4.4. Vertical separation between aircraft on passing and diverging courses shall be applied in accordance with Order 7110.65, Paragraph 5-5-6b(3), En Route.

4.23.4.5. Visual separation standards shall be applied in accordance with Order 7110.65, Paragraph 7-2-1a, Terminal.

4.23.4.6. Separate aircraft from obstructions by Five miles. NOTE: THE PROMINENT OBSTRUCTION PROTECTED AIRSPACE SCRIBED ON A TERMINAL VIDEO/GEO MAP IS NOT SHOWN AS 5 MILES.

4.23.4.7. Separate aircraft from adjacent airspace in accordance with Order 7110. 65, paragraph 5-5-9a3, and b3 .

4.23.4.8. Separate aircraft from edge of the scope in accordance with Order 7110.65, paragraph 5-5-10c.

4.23.4.9. When visual separation cannot be provided, separate a departing aircraft from an arriving aircraft on final approach by Five miles.

4.23.4.10. Provide the following separation between aircraft when conducting parallel Instrument Landing system (ILS)/ Microwave Landing System Approaches (MLS) Five miles.

4.23.4.11. Simultaneous parallel ILS and MLS approaches are not authorized when using CENRAP.

4.23.5. CERTIFICATION AND PERFORMANCE CRITERIA:

4.23.5.1. Perform an alignment check before using CENRAP in accordance with Order 7110.65, paragraph 5-1-2. Position reports from targets of opportunity shall be used if unable to comply with Order 7110.65, paragraph 5-1-2. *NOTE:* A video/geo map mark which aligns with the North Mark generated by the HOST computer shall be scribed on the video maps.

4.23.5.2. An entry shall be made with an appropriate explanation in the Daily Record of Facility Operation, AF Form 3616, as follows:

4.23.5.2.1. When required to switch to a CENRAP operation.

4.23.5.2.2. During periodic checks of CENRAP.

4.23.5.2.3. During periods of CENRAP training.

4.23.5.3. Advise pilots when the primary radar is out of service and CENRAP is in operation. Phraseology: (IAW FAAO 7110.109A) PRIMARY RADAR OUT OF SERVICE. VFR SERVICES ARE AVAILABLE ONLY TO AIRCRAFT WITH TRANSPONDERS AND ARE LIMITED TO SAFETY ALERTS, TRAFFIC ADVISORIES, SEPARATION (if appropriate) AND SEQUENCING (if appropriate) TO (name of airport).

4.23.5.3.1. The advisory may be omitted when provided on the automatic terminal information service (ATIS) and the pilot indicates having the ATIS information.

4.23.5.3.2. Issue a Notice to Airman discontinuing VFR separation services when using CENRAP provided these service are normally provided by the facility.

4.23.6. RADAR SERVICE LIMITATIONS:

4.23.6.1. Surveillance approaches are not authorized when using CENRAP.

4.23.6.2. Minimum safe altitude warning and conflict alert are not available with CENRAP or CENRAP-Plus.

4.23.6.3. Center weather data is not available when using CENRAP/CENRAP-Plus.

4.23.6.4. The normal PIDP video/geo map will be used with center radar input. Fix accuracy checks shall be completed in accordance with AFI 13-203.

4.23.6.5. Prearranged coordination agreements or directives which require the use of Mode C altitudes shall not be exercised during CENRAP operations.

4.23.7. FLIGHT CHECK CERTIFICATION REQUIREMENTS:

4.23.7.1. CENRAP must be flight checked prior to initial operational use. The flight check must be completed with a FAA flight inspection aircraft to verify the minimum altitudes at which a CENRAP target can be tracked within the terminal airspace.

4.23.7.2. The CENRAP operating instruction required in paragraph 4.23.8.1. shall include minimum altitudes that targets can be tracked with CENRAP.

4.23.7.3. Records of CENRAP flight inspections shall be in accordance with AFMAN 11-225, United States Flight Inspection Manual.

4.23.8. LOCAL PROCEDURES:

4.23.8.1. An operating instruction shall contain as a minimum the following:

4.23.8.1.1. The operational steps required to transition to and from CENRAP/CENRAP-Plus operations.

4.23.8.1.2. The minimum altitude(s) that targets can be tracked with CENRAP or CENRAP-Plus in the terminal airspace (4.23.8.1.2. Reference - Paragraph 4.23.7.1.).

4.23.8.1.3. The level of VFR services to be provided and the procedures to follow for these services (4.23.8.1.3. Reference - Paragraph 4.23.4.3.).

4.23.8.1.3.1. Local procedures shall be developed between tower and approach to permit VFR arrival/departure operations in the event that VFR sequencing services normally provided to the primary airport cannot be accomplished.

4.23.8.2. Training and proficiency requirements.

4.23.8.2.1. Facilities which utilize CENRAP or CENRAP-Plus as a primary backup mode shall:

4.23.8.2.1.1. Include within their respective operating instructions the operational steps required to transition to and from the CENRAP/CENRAP-Plus mode. The CCTLR shall

ensure personnel are knowledgeable in the procedures used to transition to and from the backup mode, and that personnel can apply the appropriate separation standards for that mode.

4.23.8.2.1.2. The Chief, Air Traffic Control Training (CATCT) and Chief, Standardization and Evaluation (CSE) shall ensure such training is consistent with local operational needs and in compliance with:

4.23.8.2.1.2.1. Identify Radar Operations: References to applicable procedures in FAAO 7110.65. TR: FAAO 7110.65, paragraphs: 4-5-1, 5-1-1, 5-1-2, 5-5-3d and e, 5-5-9a3 and b3, 5-5-10c, 5-5-63b, and AFI 13-203, paragraph 4.11.

4.23.8.2.1.2.2. Classroom Training: References to AFI 13-203, paragraph 4.23. The CATCT will develop and conduct training from the TRs in paragraph 4.23.8.2.1.2.1., 4.23.4. (Procedures), and 4.23.5 (Certification and Performance Criteria), and 4.23.8. (Local Procedures). Incorporate training into all applicable facility position certification guides.

4.23.8.2.1.2.3. Qualification/Certification: Document task items on AF Form 797. Certifying official signs off controllers' ability to employ CENRAP. The CSE will evaluate and certify controllers who successfully complete CENRAP operations. The evaluation will be documented on AF Form 623a and retained in the individuals training records until the next annual evaluation.

4.23.8.2.1.3. CENRAP procedures are used once a month for proficiency, typically on a Sunday.

4.23.8.3. A LOA with the host ARTCC is required prior to implementing CENRAP.

4.23.9. HOST CENTER RESPONSIBILITIES (IAW FAAO 7110.109A, *Center Radar Presentation*):

4.23.9.1. Facility managers shall provide the appropriate operational personnel with the following CENRAP/CENRAP-Plus information.

4.23.9.1.1. In the event that the HOST center has exceeded, or is about to exceed the number of ARTS/PIDP facilities which can be sent CENRAP/CENRAP-Plus for processing, terminate processing in the following order:

4.23.9.1.1.1. First, facilities engaged in CENRAP/ CENRAP-Plus operations for proficiency or training.

4.23.9.1.1.2. Second, facilities with the lowest level of existing/projected traffic.

4.23.9.1.2. Termination of CENRAP/CENRAP-Plus processing to the PIDP/ARTS facility(s) shall not take place until the PIDP/ARTS facility has been notified and adequate time has been provided to prepare for the loss of center target information.

Chapter 5

SPECIAL OPERATIONS AND SUPPLEMENTAL PROCEDURES

5.1. Exercises. Wing officials must brief the AOF/CC at least 48 hours in advance of exercises that involve any ATC facility or the airport movement area. The AOF/CC must approve, in advance, exercises that include removing controllers to alternate facilities or to shelter areas. Consider traffic volume and service limitations when coordinating these exercises.

5.1. (AFMC) Exercises involving the use of combat controllers in AFMC facilities require a Letter of Agreement between the ATC unit and the exercising agency.

5.1.1. Watch supervisors and senior controllers must ensure ATC facility participation does not degrade services. Watch supervisors or senior controllers may interrupt or discontinue facility participation in any exercise if flight safety is in question or it interferes with the recovery of emergency aircraft.

5.1.1.1. ATC personnel may wear gas masks in support of exercises or contingency situations, consistent with wing requirements and flight safety. If all controllers are wearing full chemical suits, including gas masks, then the AOF/CC will ensure a non-masked safety observer is present at all times the facility is open. This safety observer will have the authority to direct controllers to remove gas masks in the interest of flight safety. When an aircraft declares an emergency or, in the controller's judgment, is in distress, controllers in direct communications with the aircraft must remove the gas mask.

5.2. Aircraft Arresting Systems. Where the Air Force is responsible for control tower services, an LOP must define the following:

- Coordination between agencies involved in operating the arresting systems.
- Configuration of arresting systems.
- Intervals to use when sequencing aircraft for successive engagements.
- Procedures for remotely controlled arresting systems.
- Responsibilities concerning use of aircraft arresting systems.
- A training program to include the location,

capabilities, and procedures for all installed arresting systems.

NOTE:

OG/CC may establish multiple system priorities/configuration to meet local operational requirements.

5.3. Supervisor of Flying (SOF). When the SOF performs duties in an ATC facility, describe details in an LOP. When advice is extremely technical, or when the SOF feels that relay of information by the controller could cause an unacceptable delay, the SOF coordinates with the ATC facility and transmits directly to the affected aircraft. Limit instructions to preventing a mishap. The SOF must not perform ATC functions or transmit ATC instructions or clearances to an aircraft. A person who commandeers an ATC frequency assumes responsibility for separation of aircraft.

5.4. Aircraft Priorities. The OG/CC may set aircraft operational priorities for locally based aircraft to meet varying mission requirements. Also, the commander may prescribe priority of recurring special transient missions, such as airlift of special weapons. Locally developed operational priorities must not take precedence over priorities listed in FAAO 7110.65 and AFI 11-204. Outline local priority procedures in the base airfield OI.

5.5. Reduced Runway Separation (RRS). MAJCOMs have authority to reduce FAA air traffic control runway separation standards at their bases. This authority is for operations involving military aircraft assigned to the command. Include other aircraft in the base RRS program if the owning MAJCOMs agree. MAJCOMs publish guidance and set minimum separation standards. Specify RRS criteria in the base airfield operations instruction.

5.5. (AFMC) Reduced Runway Separation (RRS). Wings may authorize RRS to maximize runway acceptance rates. The OG/CC will establish procedures based on the guidelines below:

- Deployed aircraft are authorized RRS if a letter of agreement is signed between the host wing and deployed unit. Host wings will ensure detailed briefings are conducted prior to local flying.
- Tenant units may accept host base RRS standards that are not less than specified in Attachment 17.
- The OG/CC will ensure assigned military aircrews and supporting air traffic controllers are thoroughly familiar with authorized RRS standards. Any aircrew or controller may refuse reduced separation. When RRS is refused, FAAO 7110.65 standards apply.

5.5.1. Publish RRS standards in the en route supplement for those locations where reduced runway separation agreements between MAJCOMs allow participation by transient aircrews. Transient aircrews may refuse the reduced standards, and normal standards then apply.

5.5.2. (Added-AFMC) RRS is authorized at AFMC bases IAW AFMC Sup 1, Attachment 17.

5.5.2.1. (Added-AFMC) Any deviations that are less restrictive than RRS standards above require approval from HQ AFMC/DO.

5.6. National Terminal Radar Program. See FAAO 7210.3.

5.7. Unlawful Seizure of Aircraft . An LOP must define the base response to hijack or theft attempts, and identify a single base agency to receive ATC notification. Limit tower responsibilities to:

- Immediately activating the primary crash alarm system, or notification via landline
- Issuing current position information to fire/crash, security police, base rescue, etc.
- Assisting the on-scene commander by forwarding updated information and relaying any orders or instructions

5.8. Min-Comm/Comm-Out . Departure/Inbound Procedures must be in writing in an LOP and requires MAJCOM review and approval prior to implementation. Procedures that task or involve the FAA require an LOA.

5.9. (Added-AFMC) Civil Use of ATC Facilities Permit civil aircraft to make low approaches to an Air Force runway if the Ops Gp/Air Base Wing commander concurs. Establish procedures in an LOP.

5.10. (Added-AFMC) Jettisoning External Stores Controllers may assist aircraft in reaching an external stores drop area. Define controller assistance in an LOP, and limit to:

- A description of the drop area.
- (RADAR ONLY) Radar vectors to the area and an advisory on entering and leaving. Controllers do not determine the exact time or point to release stores.
- Instructions or clearance to the area if radar is not available.

5.11. (Added-AFMC) Using AFMC Facilities by a Federal Law Enforcement or Security Agency Approve written requests by a federal law enforcement or security agency to use AFMC ATC facilities (communications, radar positions, etc.), when possible. HQ AFMC and Ops Gp/ABW OPRs will coordinate specific ATC requirements for drug support. Establish detailed procedures in an LOP.

5.12. (Added-AFMC) Airfield Flight Operations will be IAW AFI 13-213 & AFMC/Sup 1

5.13. (Added-AFMC) Practice Instrument Approaches.

5.13.1. (Added-AFMC) VFR aircraft practicing instrument approaches at the approach control's primary airport shall be provided IFR separation in accordance with FAAO 7110.65, Chapter 4, Section 8.

5.13.2. (Added-AFMC) IFR separation to VFR aircraft in accordance with FAAO 7110.65, Chapter 4, Section 8, shall be provided to all secondary airports under the approach control's jurisdiction to the extent possible within existing resources.

PART 3

TRAINING, CERTIFICATION, AND WITHDRAWALS

Chapter 6

TRAINING

Section 6A— Controller Development Program

6.1. Controller Development Program (CDP). The Controller Development Program is an Air Force training program implemented at unit level to meet specific mission needs. The purpose of the CDP is to qualify air traffic controllers for position certification/facility rating, skill-level advancement, and facility management positions to support peace-time and combat operations. The CDP consolidates and standardizes air traffic control training by integrating Air Force, MAJCOM, and unit directives into one program. As a minimum, the CDP must include upgrade, qualification, recurring, and review training; certification guides; combat skills familiarization training; and the CDP Operating Instruction (OI). Each unit must develop, implement, and administer the CDP according to this instruction; AFI 36-2201, *Developing, Managing, and Conducting Training*; and AFMAN 36-2234, *Instructional System Development*.

6.2. Controller Development Program Operating Instruction (OI). AOF/CC must ensure a CDP OI is developed and forwarded to the MAJCOM OPR for ATC for review prior to publication and implementation The OI must establish policy and procedures for implementing the CDP and define the responsibilities of all personnel involved in the program. The CDP OI must expand those areas where further explanation is required and standardize local training procedures. Address all facets of ATC training in the OI to include:

- Training team responsibilities.
- Upgrade training.
- Qualification training.
- Recurring training.
- Review training.
- Proficiency training and testing.
- Dual qualification/certification programs.
- Newcomers indoctrination.
- 3-level task evaluation procedures.
- Training Review Board (TRB) procedures
- Documentation procedures.
- Weather training procedures.
- Simulator and non-radar training programs.
- Combat skills familiarization training.

- Automation workcenter training, as applicable.

Atch 11 provides CDP OI guidance. ***NOTE***: The training OI should not restate training requirements, procedures, or responsibilities already published.

6.2. (AFMC) Tower static board training programs.

6.3. Certification Guides. AOF/CC must ensure certification guides are developed and designed to assist in conducting training. Certification guides must identify training requirements, technical references, and objectives (objective, conditions, and knowledge/performance standards). TRs must be broken down to lowest denominator for each task item (i.e., FAAO 7110.65, paragraph 5-7-1, Note 2). TRs listed in the Master Technical and Task Reference (MTTR) must coincide with those listed in the certification guides (see Attachment 1, Glossary, for definition). Develop all certification guides (position, general, and task) according to AFMAN 36-2234, and this AFI. As a minimum, each guide must identify all tasks listed in the applicable Air Force Job Qualification Standard (AFJQS), Career Field Education and Training Plan (CFETP), and AF Form 797, **Job Qualification Standard Continuation/Command JQS**, for the applicable position or area, along with objectives.

6.3.1. Position Certification Guides (PCG). Position certification guides are developed and used to train air traffic controllers on specific knowledge and task items required for position certification. Develop a separate guide for each position requiring certification. (see Attachment 12, Sample PCG)

6.3.1.1. Conduct a position analysis for each position to define all tasks, knowledge, and technical references necessary to fulfill the training requirements for a position certification according to procedures established in AFMAN 36-2234. Related items may be clustered together. AFJQS 1C1X1-001, Air Traffic Control Operator, identifies the general core requirements and is the main source document; however, units must add locally unique training requirements to ensure the position analysis is comprehensive.

6.3.1.1.1. Identify all task items, knowledge items, and technical references required. Align in a logical order for training; (i.e., from simple to complex, basic or essential to establish building blocks for later blocks). Ensure that task and knowledge items directly support the training objective.

6.3.1.1.2. PCGs are designed in blocks of instruction. Initial block overview must identify block objective requirements, knowledge and performance standards, and recommended time limits. The number of blocks within each guide depends on the training requirements and complexity of the position.

6.3.1.2. PCG Contents. Each position certification guide must contain:

6.3.1.2.1. All AFJQS, CFETP, and AF Form 797 knowledge/task requirements with technical references (TRs) that require training.

NOTE:

CSE (TSN) must ensure FAAO 7220.1 and all applicable FAR knowledge/task requirements are complied with.

6.3.1.2.2. Objective statements according to AFMAN 36-2234, Chapter 5 for all task items requiring training.

6.3.1.2.3. Applicable air traffic control training series, paper, and CBT products that support training.

6.3.1.2.4. Simulator and nonradar scenario problems that support training or serve as a device to measure standards.

6.3.1.2.4. (AFMC) Tower static board scenario problems that support training or serve as a device to measure standards.

6.3.1.2.5. Measurement devices that validate the objective.

6.3.1.2.6. Recommended time limits, based on ATC experience and skill level for each block.

6.3.1.2.7. Identification of the point at which the trainee is ready to begin work in an actual position of operation.

6.3.1.3. Position Certification Time Limits. CCTLRs must specify position certification time limits, by hours, for each block in the position certification guide. CCTLRs may approve additional time for trainees who exceed block time limits, however do not exceed the original block time limit. CCTLR extensions must be documented on an AF Form 623a and maintained in the trainees AF Form 623 until facility rating requirements are met. Unused block hours can not be carried over to the succeeding block of training. The MAJCOM OPR for ATC approves training beyond the CCTLR extension.

6.3.1.3.1. CCTLRs must establish time limits for all 3-level apprentice controllers and 5-/7-/9-level trainees based on prior and non-prior experience in a like facility. Review and adjust PCG block time limits at least annually. Base time limits on the average time required to complete position certifications during the preceding calendar year. Hours specified will include live, simulator, and non-positional (classroom and one-on-one training). Self-study time is not included.

6.3.1.3.2. Test and evaluate trainees on their attainment of required knowledge or proficiency against established standards for each AFJQS/CFETP/AF Form 797 task item or block of instruction according to procedures established in AFMAN 36-2234. The evaluation determines the progress of the trainee. An apprentice 3-level must fulfill the requirements of a block of instruction before officially entering into the next block.

6.3.2. General Certification Guides (GCG). As deemed necessary, the AOF/CC may require the development of general certification guides to identify those knowledge and task items that are common to all positions of operation within the facility or automation workcenter (e.g., local operating area, bomb threat procedures, facility evacuation procedures, facility forms, crew change, position relief, equipment operations).

6.3.3. Task Certification Guides (TCG). Task Certification Guides (TCG). Units must use published Air Force TCGs (AT-M-03; AT-M-04; AT-M-05). Units may supplement (according to TCG instructions) those published Air Force TCGs with MAJCOM, command, and local requirements. AOF/CC must ensure TCG supplements are developed to assist in conducting qualification training.

6.3.3.1. As a minimum, ensure local WS, task certifier, trainer, and ATCTD administrator TCGs are developed.

6.3.3.1. (AFMC) TERPS TCGs is developed.

6.3.3.1.1. DELETED.

6.3.3.2. (Added) Units with AUS workcenters must develop TCGs based on local AF Form 797 requirements IAW paragraph 6.6.2.1. As a minimum, the following AUS TCGs are required:

- CATCA (management tasks)
- Automation Specialist (to include all equipment/system administration tasks for location)

Section 6B— Specialty Training

6.4. AFSC 1C131 Apprenticeship Requirements. Supervisors must ensure a comprehensive 3-level task evaluation is completed on all tasks taught in technical school (performed at your facility/complex) prior to beginning training towards facility rating. Evaluate the adequacy of formal training by comparing it to STS standards in the CFETP. Do not task certify apprentice controllers, only task evaluate them according to 3-level technical school standards in the CFETP. Supervisors must report deficiencies to the technical school by documenting deficiencies on the 1C1X1 Field Evaluation Questionnaire (FEQ) or by calling the Customer Service Information Line (CSIL) at Keesler AFB. Reporting procedures are in the CFETP 1C1X1 Part II, Section E. Immediately after task evaluation is completed, 3-level apprentice controllers may, with supervisor's approval, begin training on AFJQS-001 task items for the appropriate facility rating/SEI. Upgrade training can not begin earlier than 3 months after arrival at the first duty station.

NOTE:

AFI 36-2201 establishes procedures for processing and administering the Career Development Course (CDC).

6.5. Upgrade Training (UGT) Requirements.

6.5.1. AFSC 1C151. Complete the requirements of this instruction, AFI 36-2201, CFETP 1C1X1, and position certifications/facility ratings.

6.5.1.1. Control Tower. Local, Ground, and Flight Data position certifications (CTO Rating).

6.5.1.2. Terminal Radar Facilities:

- GCA: Arrival control, Arrival Assist., and RFC
- RAPCON: Approach control, Approach Assist., and Arrival control

NOTE:

The above requirements are the minimum. Qualified controllers should gain additional job experience/ knowledge and obtain other facility of assignment certifications after the above position certifications are met for the award of the special experience identifier (SEI).

6.5.1.3. Before completing SEI requirements, all 1C131 controllers must complete combat skills familiarization training according to AFI 10-403, paragraph 2.5.2. NOTE: The optimum time for this training to take place is during the 3 months prior to beginning upgrade training.

6.5.2. AFSC 1C171. Complete the requirements of this instruction, AFI 36-2201, the ATC Craftsman portion of AFJQS 1C1X1-002, AT-M-03 (Craftsman TCG), and the resident Craftsman course.

6.6. Qualification Training.

6.6.1. Conduct qualification training according to AFI 36-2201. Exceptions: Only qualified controllers holding AFSC 1C151 or above may train or monitor. 1C151 controllers certified to train may conduct qualification training on all controllers regardless of skill level. Individuals will not monitor unless trainer certified.

6.6.1.1. The AOF/CC must ensure all AUS equipment and qualification (specialist and CATCA) tasks are identified and incorporated into locally developed AF Form 797s.

6.6.2. Air Traffic Control Management. AOF/CC must ensure management personnel meet minimum qualification requirements. AFJQS 1C1X1-002, Air Traffic Control Management, identifies the tasks required to become certified as an Air Traffic Control Craftsman, Terminal Instrument Procedures Specialist (TERPS), Chief Standardization Evaluation (CSE), Assistant CSE, Chief Air Traffic Control Training (CATCT), Assistant CATCT, Chief Controller (CCTLR), Assistant CCTLR, Chief, ATC Training and Standardization (TSN), and the Air Traffic Control Training Device (ATCTD) System Administrator. Use this document and associated certification guides (AT-M-03, AT-M-04, AT-M-05) to plan and certify related training.

6.6.2.1. The AOF/CC must ensure all Chief, Air Traffic Control Automation (CATCA) responsibilities are identified and incorporated into a locally developed AF Form 797 (applicable to units with AUS workcenters). Use the locally developed AF From 797 and CATCA TCG to plan and certify related training.

6.6.2.2. Management training should be conducted by the individual currently holding the management position. Task certification should be conducted by other staff members who have completed task certifier's training and are qualified on the appropriate section of AFJQS 1C1X1-002 (AF Form 797 for AUS work centers) as CCTLRs, CSEs, CATCTs, TSNs, and CATCAs. When this is not possible, AOF/CCs who have completed certifier's training should certify tasks in the applicable section of AFJQS 1C1X1-002. *Certification Exception:* Certification of TERPS knowledge/task items will only be accomplished by a previously certified TERPS specialist at the unit or by MAJCOM/HQ AFFSA TERPS personnel who have completed task certifier training. Certification of AUS knowledge/task items will only be accomplished by a previously certified SSgt 5-Level or higher AUS or CATCA at the unit. Certification of CATCA knowledge/task items will only be accomplished by a previously certified CATCA at the unit. If unit personnel are not available to certify the items, MAJCOM or HQ AFFSA AUS personnel who have completed task certifier training may certify the tasks. The unit commander must designate these certifiers in writing.

6.6.3. Dual Qualification/Certification Programs:

6.6.3.1. Dual Qualification Program. AOF/CC must develop a dual qualification program. ***NOTE****: 12 month short tour locations are exempt from this requirement.* Dual qualification training in ATC facility operations is required to develop qualification in all aspects of the duties and responsibilities contained in the specialty description. Facility managers must support and encourage career controllers to broaden their background/experience. Radar-only or tower-only career controllers should be given the opportunity to complete ratings/certifications in the opposite type facility. This will develop well-rounded future supervisors and managers.

6.6.3.1.1. Priority consideration must be given to individuals in 7-level upgrade training during the mandatory 18 month time requirement.

6.6.3.1.2. A controller is dual qualified when they have been awarded both a tower and a radar special experience identifier (SEI).

6.6.3.2. Dual Certification Program. AOF/CC must institute a dual certification program which requires selected individuals to obtain dual certification to ensure adequate capability to sustain ATC services during periods of austere/unusual personnel situations. All controllers holding dual certifications in this program must maintain proficiency in both facilities to remain dual certified.

6.6.4. Trainer Qualification: Individual must hold AFSC 1C151 or above, be position certified or facility rated, complete the trainer's section of AFJQS-001, complete AT-M-01 (Trainers Guide), be recommended by the supervisor, complete a formal OJT trainer course, and be appointed in writing by the unit commander (AOF/CC or CCTLR may appoint trainers if this responsibility has been delegated by the commander).

6.6.5. Task Certifier Qualification: Individual must hold AFSC 1C171 or above, be position certified or facility rated, complete a formal OJT task certifier course, and be appointed in writing by the commander (AOF/CC or CCTLR may appoint task certifiers if this responsibility has been delegated by the unit commander). *Exception*: Task certifiers for AFJQS-001 must be at least a 1C151 SSgt.

6.6.6. Combat Skills Familiarization Training: All controllers identified to deploy (UTC assigned) must complete all required training according to Chapter 14, AFI 10-403, and AFMAN 13-220.

6.7. Air Traffic Control Training Device (ATCTD). The ATCTD is a mission essential equipment resource required to train radar air traffic controllers. ATCTDs must not be used as a word processing device, nor used for any purpose other than training air traffic controllers. The administrator must work closely with the CATCT to incorporate training materials and scenarios. Only authorized software programs may be loaded on the ATCTD. MAJCOMs may reallocate ATCTDs to other locations within their command to satisfy air traffic control radar simulation training requirements. *NOTE:* Locations with automated ATC radar systems will use the embedded simulation capabilities (i.e., Enhanced Target Generator, AT Coach, etc.) in place of the ATCTD.

6.7.1. Radar CCTLRs must ensure a comprehensive radar simulator program is developed, administered, and maintained. Radar CCTLRs must appoint individuals to fill the additional duty positions of ATCTD System Administrator (TDSA), and Assistant TDSA. The TDSA must work closely with the CATCT (TSN) to incorporate CATCT (TSN) developed training material and scenarios. Both the TDSA and assistant will have a thorough understanding of the ATCTD operations manual. Access to the system for other than training will be limited to the TDSA and their assistant(s). Assistants will be trained to a level of knowledge equivalent to the TDSA. Include additional specific responsibilities in an appointment letter. CCTLRs will ensure all controllers are trained on the proper use of the system.

6.7.2. Trainee controllers should not control live traffic until completing a comprehensive radar simulator training program for the position in which certification is being accomplished. CCTLRs approve all exceptions and document on appropriate training form. Exceptions may include extended simulator outage or demonstrated acceptable performance levels during the initial simulator evaluation.

6.7.3. The ATCTD may be used to supplement evaluation procedures to evaluate those skills not observed with live traffic (e.g., tasks controllers do not routinely perform, such as transition to and from non-radar procedures).

6.7.4. When necessary, CCTLRs must establish simulator proficiency programs to aid in maintaining controller proficiency for position certified or facility rated controllers. This is intended to be in addition to, not a substitute for live traffic proficiency requirements.

6.7.5. Outline procedures for radar simulator programs in the CDP OI. The CCTLR must describe what, how, who, and when proficiency training is administered and documented (e.g., maintain an ATCTD training log to track usage, malfunctions/recurring problems, time used for upgrade/qualification training). The CATCT, with TDSA support, must:

6.7.5.1. Develop scenarios which provide training in basic fundamentals.

6.7.5.2. Incorporate simulator scenarios into the appropriate position certification guide.

6.7.5.3. Develop a sufficient number of realistic scenarios that meet or exceed normal traffic levels and complexity. Stress areas or position tasks controllers are not routinely required to perform.

6.7.5.4. Develop position scenarios to serve as a device to measure standards during the initial evaluation.

6.7.5.5. Develop a terminal labeling system to track malfunctions and aid in setting up network scenarios. Labels should be visible to reduce confusion.

6.7.5.6. Develop a print out of the basic keyboard commands as listed in the ATCTD manual for each ATCTD.

6.7.5.7. Maintain a readily available copy of the most current manual.

6.7.5.8. (Added-AFMC) Retain scenario performance of all controllers in position qualification training until they progress to the next block of training. This may be accomplished on the ATCTD system or through printed paper copies.

6.7.6. For ATCTD technical support contact HQ ESC OL-D/E, Tinker AFB, OK. Contact your MAJCOM for all other ATCTD issues.

6.7.7. (Added-AFMC) Tower CCTLRs must ensure a comprehensive static board scenario program is developed, administered, and maintained.

6.7.7.1. (Added-AFMC) The tower static board scenarios may be used to supplement evaluation procedures to evaluate those skills not observed with live traffic (e.g., tasks controllers do not routinely perform).

6.7.7.2. (Added-AFMC) Outline procedures for tower static board scenarios in the CDP OI. The CCTLR, with CATCT/TSN support, must:

- Incorporate scenarios into the appropriate position certification guide.
- Develop a sufficient number of realistic scenarios that meet or exceed normal traffic levels and complexity. Stress areas or position tasks controllers are not routinely required to perform.

6.8. Non-Radar Training Program. Radar CCTLRs (excluding RFCs) must ensure a nonradar training program is developed. CCTLRs must coordinate with the CATCT to ensure the non-radar training program conforms with ISD principles and to include nonradar scenarios into the appropriate position certification guide; e.g., Approach, Approach Assist. Each scenario must identify training requirements,

technical references, objective, conditions, and knowledge and performance standards. The nonradar program will:

6.8.1. Provide training in basic fundamentals.

6.8.2. Consist of problems that progress from basic to a level of complexity equal to that which may be encountered in the facility.

6.8.3. Consist of problems consistent with control responsibilities established in letters of agreement which define radar loss procedures.

6.8.4. Consist of a sufficient number of realistic problems designed to continually challenge position certified/facility rated controllers.

6.8.5. Consist of problems that transition from a radar to a nonradar environment back to a radar environment. Conduct nonradar training using the air traffic control training device (ATCTD) or suitable substitute (i.e., Enhanced Target Generator (ETG)).

6.9. Air Traffic Control Training Publications. CATCTs must incorporate applicable Air Traffic Control Training Series (ATCTS), computer-based or paper products, into the CDP and ensure availability to all facilities according to AFI 36-2222, *Air Traffic Control Training Publications*. Air Force Index 25, *Index of Air Traffic Control Training Publications*, identifies those training products validated for Air Force use. CATCTs must maintain one (1) master set of all applicable ATCTS products (paper or electronically).

6.10. Newcomer Indoctrination Program. CCTLRs must ensure a Newcomer Indoctrination Program is developed and implemented which is applicable to both apprentice and skilled controllers. Use AT-M-08**,** *Facility Indoctrination/Orientation Guide*, as a reference to develop the program.

6.11. Proficiency Training and Testing. CATCTs must develop and publish monthly proficiency training requirements for all controllers. Local ATC managers determine areas to be included as part of training and testing. Include required recurring and review training areas, as appropriate. CSEs (TSNs) must develop and administer associated monthly proficiency testing products and other associated evaluation methods, (e.g., performance evaluations via simulator scenarios or written tests). Define additional responsibilities and procedures for monthly proficiency training and testing in the CDP OI.

6.11. (AFMC) Proficiency testing will be closed book, proctored test by the CSE/TSN or their assistants.

6.11.1. At a minimum, CATCAs will submit quarterly AUS training requirements according to paragraph 1.1.9.2.4.1. Include required recurring and review training areas, as appropriate.

6.11.2. (Added-AFMC) CCTLRs must establish procedures for controllers returning from TDY's, DNICs, and leaves of over 30 days to receive training missed during their absence. These procedures should ensure that all new procedures or operations are thoroughly reviewed and trained prior to actively controlling traffic or supervising facility operations unmonitored.

6.12. Recurring Training. The following items, including technical references (TR), are mandatory. Document completion of training on AF Form 1098, **Special Task Certification and Recurring Training**.

6.12.1. Electromagnetic Interference (EMI). Conduct annually. TR: AFI 10-707, *Spectrum Interference Resolution Program*, FLIP General Planning Guide (MIJI), and locally developed material pertinent to unit's equipment.

6.12.2. Anti-Hijack Training. Conduct semiannually. TR: CBT-A-2 and AFI 13-207, *Preventing/ Resisting Aircraft Piracy (FOUO)*.

6.12.3. Aircraft Characteristics and Performance. Conduct annually. TR: CBT A-9, CBT-A-10, CBT-A-11, CBT-A-12, and any LOPs and/or locally developed material on the characteristics and limitations of aircraft the facility serves with special emphasis on base assigned aircraft. At locations with deployments, the AOF/CC must ensure controllers are trained on aircraft characteristics prior to the deployment date. Review annually and make adjustments as required. If applicable, offer to supporting FAA facilities.

6.12.4. ATC Training Series. Complete all new series (paper/CBT) and/or the revised portion of existing series that apply to facilities in which controllers hold position certifications or facility ratings within 60 days of receipt (90 days for ANG). CATCTs must update supporting programs which reference the ATC training series. Complete all new management training series according to the instruction in the training guide.

6.12.5. Special Aircraft Operations By Law Enforcement and Military Organizations (if applicable). Conduct annually. TR: CBT-A-6 and FAA Orders 7110.52 and 7110.67.

6.12.6. Tower Visibility Observations. Conduct annually for all tower controllers TR: AT-G-60.

6.12.7. Wake Turbulence . Conduct semiannually. TR: FAAO 7110.65 and CBT-A-3.

6.12.8. Snow Control (if applicable) . Conduct annually. TR: LOPs.

6.12.9. Nonradar Control Problems. All controllers certified in a radar control position, excluding RFC, must complete at least one nonradar control problem per month. Conduct nonradar training using the air traffic control training device (ATCTD) or suitable substitute, (e.g. ETG). TR: CBT-A-5 and FAAO 7110.65.

6.12.10. Alternate Facilities (if applicable). At locations with alternate facilities conduct training at least semi-annually. TR: LOPs Note: Training in alternate facilities may require safety observers to be in place at the primary facility when operations are being worked from the alternate.

6.12.11. The Bird Aircraft Strike Hazard (BASH) Reduction Program. Conduct semiannually (in conjunction with the bird migratory seasons.) TR: AFPAM 91-212, *Bash Management Techniques*, CBT-A-7, and LOPs.

6.12.12. Crew Resource Management (CRM). Conduct annually in conjunction with facility evaluations. TR: AT-M-06 and CBT-G-23.

6.12.13. (Added) Center Radar Presentation (CENRAP) (if applicable). Conduct semi-annually. TR: 4.23.

6.12.14. (Added-AFMC) MSAW altitude review - conduct annually. TR: Local data from TERPS

6.13. ATC Weather Familiarization Training and Cooperative Weather Watch (CWW). All ATC personnel must receive CWW and weather familiarization training (to include local weather phenomenon training) according to AFMAN 15-111, *Surface Weather Observations* and AFJQS 1C1X1-001. Facility

managers must ensure training and task certification are accomplished before controllers are qualified to work a position unmonitored. Document training/task certification on AFJQS 1C1X1-001, ATC Operator.

6.14. Tower Visibility Observation Training and Certification. Tower personnel must be trained and certified to take tower visibility observations at each new location before they are qualified to work a position unmonitored. Initial training and certification for each base of assignment will be accomplished by a certified weather observer. Recurring (annual) certification will be accomplished by the CSE (TSN). When initial certification by weather personnel is not possible, only the CSE (TSN) may act as the certifier. Document initial Tower Visibility Observation Certifications at each new location on AF Form 3622, **ATC/Weather certification and rating Record**. Document recurring (annual) certifications on AF Form 1098, **Special Task Certification and recurring Training**.

Section 6C—Training Administration and Evaluation

6.15. Master Training Plan. CATCTs must maintain a master training plan to ensure training products remain current according to applicable technical references. The CATCT must continuously update the master training plan to ensure accurate training products are available to all facilities/workcenters. The master training plan shall include as a minimum:

6.15.1. AFJQSs.

6.15.2. AF Form 797s.

6.15.3. MTTR, Section 1 and 2 (see Attachment 1, Glossary, for definition).

6.15.3.1. The MTTR, section 1, is the single source document used to determine if all facilities/workcenters have the most current and applicable technical references to support training.

6.15.3.2. The MTTR, section 2, is the primary tool used to validate and ensure 100 percent facility/workcenter task coverage. Based on regulatory changes CATCTs must ensure this document is updated constantly.

6.15.3.3. To aid in keeping the MTTR, section 1 and 2 current it is recommended that CATCTs develop a computerized process (i.e., using Microsoft Word, Excel) that will automatically “find” and “replace” updated, changed, or outdated technical references (see Attachment 13, Sample MTTR). For example, if FAAO 7110.65, chapter 5, paragraph 5-6-1b changes to 5-6-1c, a CATCT would engage the “find” and “replace” feature using the computer. Once found, the CATCT would determine the validity of the change. Since the MTTR requires separate position and duty (i.e., local control PCG, approach PCG, CCTLR TCG) task break downs, the CATCT would know precisely which training products (PCGs, TCGs, etc.) require TR updates.

6.15.4. Copies of all Air Force and facility/workcenter certification guides (paper or electronic copies).

6.15.5. ATC CFETP, Part 1 and 2.

6.16. AOF Training Review Board. AOF/CC must establish a training review board. AOF/CC must convene a training review board monthly. Publish and maintain minutes for one year. Outline administrative policies and procedures to include frequency of meetings, board membership, and agenda in an OI.

The following individuals must attend this board as a minimum: AOF/CC, AOF/DO, AOF/SO, CCTLR, Airfield Management Training Manager, CATCT, CSE (or TSN), TDSA, and CATCA.

6.16. (AFMC) Forward TRB minutes to HQ AFMC/DOAC for review NLT 10 working days after the board meets. Minutes should provide the minimum information:

- Status of personnel in 3 level task evaluation:

  Name, Rank, date started training, brief description of training, (weather cert. complete, indoctrination package complete, etc.).

- Status of personnel in 5 level upgrade training:

  Name, rank, date started upgrade training, date started position training, positions rated in, position in training for, block of PCG (3/6), brief description of training to include CDC progression.

- Status of personnel in 7 level upgrade training:

  Name, rank, date started upgrade training, block of craftsman TCG (3/6), brief description of training.

- Status of personnel in qualification training:

  Name, rank, date started training, date started position training, position rated in, position in training for, block of PCG (2/8), brief description of training. Address dual qualification training.

- Status of personnel in management qualification training:

  Name, rank, date started training, facility(s) rated, management position in training for, block of TCG (3/9), brief description of training/projects and AT-M progression if applicable. Include officer training: Name, Rank, date arrived on station, date started training, position in training for, block of PCG (3/7), brief description of training. Include AT-M-10 (AT-M-11 when published) start date and progression.

- Proficiency Training

  Pro-Time

- Status of air traffic staff and controller force proficiency for the month.

Ex.	Eligible	Tested	Average Score	Not Tested	Failure
	18	15	90	3	1

- Status of personnel: edits, stop training, suspensions, specials, and withdrawals:

  Include rank, name, brief narrative of circumstances, and status of actions taken.

NOTES:

Include controllers who are working outside the career field.

- Status of ATCTD: (Address hours used, down time, problems with, and scenario development)
- Status of Controller Development Program (CDP): PCG, TCG, and GCG development, MDS, status of CDP reviews and updates, controller cockpit orientation, indoctrination training, training classes, trends from pro-tests, training OI updates and reviews, annual training (weather, etc..), combat skills training, and other pertinent training materiel.

- Status of Records Review: Briefly describe status of records review.

6.16.1. Training Review Board Agenda. As a minimum, the agenda must address the following areas (as applicable to each location):

- 3-level task evaluation progress.
- 5-level upgrade training.
- 7-level upgrade training.
- Qualification training (CSE, WS, AUS, trainer, combat, etc.).
- Dual qualification/ certification training.
- Combat familiarization training.
- Proficiency of all controllers, including staff (proficiency of Airfield Management Quality Assurance Evaluator (QAE) (if assigned)).
- Status of trainees experiencing difficulty in training (EDIT), stop training, suspensions, and withdrawals (identify reason and corrective actions).
- ATCTD or suitable substitute (ETG) usage and outages.
- Status of AF Form 623, On-the-Job Training Record, records review and documentation trends on trainee evaluations, include automated deficiencies.
- Status of nonradar training program.

6.16.2. When the Training Review Board identifies problems or deficient areas, corrective actions must be established. Status of previous months corrective actions must be addressed at each TRB.

6.17. Training Records. Maintain AF Form 623**, On-the-Job-Training Record**, on all 1C1X1 and 13MX personnel who are facility rated, position certified, or in training. ***NOTE:*** Personnel in staff duty positions (NAF and above) which do not require position certifications or facility ratings are exempt from this requirement. Personnel in these staff positions will hold their AF Form 623 during these assignments for subsequent assignments at unit level. Records must be readily available to the trainee, trainer, and supervisor.

6.17.1. Maintain the following items in each training record:

6.17.1.1. AF Form 1098, **Special Task Certification and Recurring Training.**

6.17.1.2. AF Form 623a, **On-The-Job Training Record- Continuation Sheet** .

6.17.1.2.1. Training Evaluations.

6.17.1.2.2. Certification and Rating Evaluations.

6.17.1.3. Career Field Education and Training Plan (CFETP).

6.17.1.4. Applicable 1C1X1 AFJQS.

6.17.1.5. AF Form 797.

6.17.1.6. AF Form 3622, **Air Traffic Control/Weather Certification and Rating Record**.

6.17.2. Document trainer and task certifier course completion on inside cover of AF Form 623.

6.17.3. The CDP OI must define procedures for review of training records. As a minimum, CATCTs must ensure training records are examined monthly for accuracy.

6.17.4. AF Form 1098. At the beginning of the calendar year, insert a new AF Form 1098 into AF Form 623 and start entries for that year. Retain the previous year's forms in the training record for one year and then remove and present to the individual. Record recurring, review, and supplemental training, and test results on AF Form 1098.

6.17.5. AFJQS-1C1X1-001 and 1C1X1-002 are "historical" documents. They will only be removed/replaced if they are superseded or become unserviceable.

6.17.5.1. To replace an unserviceable AFJQS, a qualified task certifier will transcribe only those tasks identified in the facility MTL that the individual is currently qualified to perform. Transcribing these tasks is equivalent to recertifying the task.

6.17.5.1.1. Prior to recertification, the certifying official must have knowledge or verify the individual can and does perform the task. Enter the date of transcription (day task was validated) in the training completion date (TCD) column. The certifier shall initial in the certifying official (CO) column and the trainee shall initial in the trainee initial (TI) column.

6.17.5.2. Tasks previously certified, but no longer performed, shall be transcribed using the certification date in the unserviceable/superseded AFJQS.

6.17.5.2.1. Enter the original date in the TCD column. Do not enter any initials (certify) for these task items, i.e. the individual was qualified in the tower but is no longer certified to perform the tasks.

6.18. Training Evaluations. Trainers must accomplish training evaluations to document trainee progress toward task/block objectives contained in the certification guides. Use AF Form 623a for all evaluations. As a minimum, address the following in every training evaluation:

- Name, inclusive dates of evaluation, position, block of training, and block time limit.
- Time spent in each category of training (live, simulator, non-positional) and total time spent training in current block. (Only applicable to position certification training).
- Results of previous evaluation's corrective action.
- Specific tasks covered.
- Status of trainee development. Assess the trainee's progress, or lack of progress, toward the block objectives. Include deficient areas within the block of training.
- Identify the cause(s) of unsatisfactory progress, if applicable. Be as specific as possible and do not restate the deficient areas only.
- Identify specific action(s) to correct deficient areas or unsatisfactory progress (if applicable).
- Other comments; e.g., interruptions to training, date identified as "experiencing difficulty in training" (EDIT).
- Trainee comments, if necessary.

NOTE:

Trainees may have deficient areas and still be progressing satisfactorily. CCTLRs identify trainees who are not progressing satisfactorily as "experiencing difficulty in training" and specify in the training evaluation corrective actions to be taken. CCTLRs identify when a controller is no longer "experiencing difficulty in training."

6.18.1. Complete training evaluations on each trainee in upgrade or position qualification training at least twice a month. CCTLRs must identify specific frequency of documentation in the CDP OI. CCTLRs must identify when weekly or daily training evaluations are accomplished for trainees identified as EDIT. 7-level training evaluations may be discontinued on individuals who are only waiting to complete the resident craftsman course once the following items are completed: AFJQS 1C1X1-002, section 1; AT-M-03; and 18 months OJT. Complete training evaluations on individuals in CCTLR, CATCT, CSE, TSN, TDSA, TERPS, CATCA, and the associated assistant positions at least monthly.

6.18.2. The trainee, trainer, and supervisor**,** must review and sign training evaluations. Also, the AOF/CC, AOF/DO, CCTLR**,** and CATCT must review and sign training evaluations for trainees identified as "experiencing difficulty in training."

6.18.2. (AFMC) CATCT/TSN and facility CCTLR must review and sign all training evaluations.

6.18.3. Maintain all training evaluations on apprentice controllers until awarded the SEI for assigned facility. Maintain all evaluations on controllers in 7-level UGT until awarded the 7-skill level. Maintain training evaluations on controllers in qualification training until position certified or management position qualified. Maintain all position certification evaluations until the facility rating encompassing the position certification is awarded. Maintain facility rating evaluations until the first annual evaluation is completed. Retain the most current annual evaluation in the controller's record.

6.19. Automated Training Products. MAJCOMs must request a waiver to this AFI to use automated OJT documentation. Automated training products must be readily available to the trainee, trainer, and supervisor.

6.19.1. The CCTLR determines the maintenance of automated training products and establishes documentation procedures. Establish alternate procedures for outages affecting automated training products. Identify governing procedures and responsibilities in the CDP OI.

6.19.2. A hard copy of AF Form 623 training records must accompany personnel when they depart TDY or PCS according to paragraph 6.17.

6.20. AFJQS 1C1X1-001 and 002 Requirements. AOF/CC must ensure each applicable requirement identified on the cover page of AFJQS 1C1X1-002, *Air Traffic Control Management* is complied with. CCTLRs must ensure each applicable training requirement identified on the cover page of AFJQS 1C1X1-001, *Air Traffic Control Operator* is complied with. Only the AOF/CC and appropriate CCTLR can defer AFJQS 1C1X1-002 and 001 tasks, respectively.

6.20. (AFMC) Only HQ AFMC/DOAC can defer AFJQS 1C1X1-002 Section 2, TERMINAL INSTRUMENT PROCEDURES (TERPS) tasks. AOF/CC will submit in writing a letter to HQ AFMC/DOAC requesting deferment and a brief justification of the deferred tasks.

Section 6D—Additional Requirements

6.21. Special Tactics Team (STT) Members (AFSC 1C2X1) Training in Air Force Air Traffic Control Facilities. Each CCT member must meet medical qualifications for ATC duty. Additionally, each CCT member must have an Airman Written Test Report or Control Tower Operator Certificate. CCT members will not work unmonitored until meeting the requirements of this instruction and applicable FARs.

Chapter 7

AIR TRAFFIC CONTROL SPECIALIST (ATCS) CERTIFICATES (FAA FORM 7220.1)

7.1. Qualification For and Issue of Initial ATCS Certificate (FAA Form 7220.1). Individuals must qualify physically according to AFI 48-123**,** *Medical Examination and Medical Standards,* (for GS-2152 personnel, FAA medical standards) satisfactorily complete a formal Department of Defense (DoD) or DOT basic ATC Course, and satisfactorily complete the FAA CTO written test or hold an FAA CTO certification.

NOTE:

To conform with federal guidelines and preclude legal/liability problems, only personnel holding a current Air Traffic Control Specialist certificate shall be authorized to perform air traffic control duties in USAF facilities. This applies to any issuance of air traffic control instructions to airborne aircraft and aircraft on the ground over ATC frequencies, even under direct supervision by a qualified air traffic controller. This restriction does not apply to simulators used for training or familiarization purposes, nor does it preclude personnel from monitoring air traffic control operating positions.

7.2. Replacement of the ATCS Certificate. The ATCS examiner will replace lost, destroyed, or unserviceable certificates.

7.3. Suspension of the ATCS Certificate. The squadron commander responsible for ATC may suspend an ATCS certificate when a controller is pending withdrawal of their AFSC or when deemed necessary in the interest of aviation safety. The squadron commander will fully investigate the circumstances of the suspension.

7.4. Cancellation of the ATCS Certificate. An ATCS certificate is valid until voided. When withdrawing the 13MX, 1C1X1 AFSC, or civilian equivalent permanently or releasing an individual from active duty or civil service, the facility chief will void the ATCS certificate by printing "VOID" in block letters on the front of the certificate.

7.5. Reissuance of the ATCS Certificate:

7.5.1. The ATCS examiner will reissue the ATCS certificate to individuals who have a primary or secondary AFSC of 13MX or 1C1X1, will perform air traffic control duties, and meet one of the following conditions.

- An active duty controller who returns from duty outside ATC.
- A discharged controller who reenlists or joins the ANG as an air traffic controller.
- A previously certified FAA or DoD or military controller who is hired as a GS-2152 (Terminal) at an ANG or AFRC location.
- An individual whose certificate was canceled for medical reasons, but the medical condition no longer exists and MAJCOM/SGP medically certifies the controller.

7.5.2. The ATCS examiner will verify the individual meets criteria of paragraph 7.1 before reissuing the certificate.

Chapter 8

CERTIFICATIONS, RATINGS, AND SPECIAL EVALUATIONS

8.1. Evaluation Requirements. The CSE, TSN, or ACSE will ensure the trainee controller meets the requirements of FAA Order 7220.1 and the applicable AFJQS. Accomplish the knowledge evaluation by using the CTO and ATCS examiner-developed facility rating tests based on the objectives set in the PCG. Observe the trainee's performance for a reasonable period under normal workload using the standards in the PCG.

8.2. Evaluation Action. Take the following action upon completion of an evaluation, as appropriate.

8.2.1. Control Tower Facility Rating:

8.2.1.1. Pass. Issue FAA Form 8060-4, Temporary Airman Certificate and send FAA Form 8400-3, Application for An Airman Certificate and/or Rating, to the FAA. Document rating on AF Form 3622, **Air Traffic Control/Weather Certification and Rating Record.**

8.2.1.2. Fail. Document evaluation on AF Form 623a, **On-The-Job Training Record--Continuation Sheet**. Retain AF Form 623a until the individual passes the rating.

8.2.2. Control Tower Position Certification. Document passing or failing the evaluation on AF Form 623a . Also, document all position certifications not included in the CTO rating on AF Form 3622.

8.2.3. Radar Facility Rating:

8.2.3.1. Pass. Document on ATCS certificate and AF Form 3622.

8.2.3.2. Fail. Document the evaluation on AF Form 623a and retain until the individual passes the rating.

8.2.4. Radar Position Certification. Document passing or failing the evaluation on AF Form 623a. Also, document all position certifications not included in the RAPCON, GCA or RFC ratings on AF Form 3622.

8.3. Certification at Temporary Locations. Certifications will be according to FAA Order 7220.1. CTO Examiners for combat units must coordinate with the appropriate FAA region for CTO examiner authority when deployed on normal exercises within the national airspace system (NAS) involving the control of live traffic. Controllers deploying outside the NAS do not require FAA certification.

8.4. Position Certification and Facility Rating Suspension. The AOF/CC, CCTLR, or appropriate examiner have authority to suspend position certifications and facility ratings. When a qualified controller is not current or proficient due to DNIC, leave, or lack of position time, or their control practices present a potential hazard to flying safety, suspend their position certifications or facility ratings. Controllers not assigned to ATC duties IAW AFI 36-2201 *Developing, Managing, and Conducting Military Training Program*, shall have their certifications/facility ratings suspended. If suspension is due to a controller's demonstrated potential hazard to flying safety, suspend all position certifications and facility ratings in all facilities.

8.4.1. If the suspension was a result of control practices which were a hazard to flying safety, annotate the controllers AF Form 3622 with an "S" and the effective date of the suspension in the "Date Canceled" block next to the rating being suspended. Document on AF Form 623a and place in the controller's AF Form 623. Include the following as a minimum:

- Controller's name.
- Effective date of suspension.
- All ratings and certifications affected.
- Reason for rating or position certification suspension.
- Recommended course of action.
- Signature of suspended controller and suspending authority.

8.4.2. Re-enter the controller into training within a reasonable amount of time, cancel their rating or position certification, or initiate AFSC withdrawal and ATCS certificate cancellation actions.

8.4.3. A qualified controller must train or monitor the suspended controller in position until reinstatement of the certifications or ratings through special evaluation.

8.5. Cancellation of Position Certifications and Facility Ratings. Cancel position certifications and facility ratings when a controller departs PCS, PCA, or transfers to another DoD location, or does not re-enter into training within a reasonable amount of time after suspension. The AOF/CC and CCTLR have authority to cancel position certifications and facility ratings.

8.5.1. Facility Ratings. Enter a "C" and the effective date of the cancellation in the "Date Canceled" block on the controller's AF Form 3622, next to the facility rating being canceled, or split the block on a previously documented suspension and enter the "C" and effective date.

8.5.2. Position Certifications. Remove AF Forms 623a from the controller's AF Form 623 for the canceled certifications. When canceling CI, CA or CT position certifications, enter "C" and the effective date of the cancellation in the "Date Canceled" block on the controller's AF Form 3622, next to the position certification being canceled, or split the block on a previously documented suspension and enter the "C" and effective date.

When canceling position certifications because of PCS or PCA and the individual did not get a facility rating, transcribe position certifications from AF Form 623a to AF Form 3622 and include issue and cancellation dates.

8.6. Notification of Position Certification or Facility Rating Suspension or Cancellation. Notify the CCTLR, CATCT, CSE , TSN, CTO examiner (if other than CSE), and AOF/CC when canceling or suspending a controllers certification for other than PCS or PCA.

8.7. Special Evaluations. There are two purposes for using a special evaluation; reinstatement of a controller's suspended position certifications or facility ratings, or to evaluate a qualified controller's performance for other than reinstatement. When a controller has not been in position for 30 consecutive days due to DNIC, leave or other absences, a special evaluation will be accomplished in all certified positions. Only the CSE, TSN, ACSE or CTO examiner will conduct special evaluations for reinstatement. For other than reinstatement the CCTLR, CSE, TSN, ACSE, CTO examiner, or a qualified WS controller may conduct a special evaluation.

8.7.1. Documentation.

8.7.1.1. For Other Than Reinstatement. Annotate on AF Form 3616, *Daily Record of Facility Operation:*

- Who is performing the special evaluation.
- Who the special evaluation is being conducted on.
- Positions the special evaluation is being conducted in.
- Reason for the evaluation.
- Document unsatisfactory results on AF Form 623a or suitable substitute. Forward to the CCTLR for review and appropriate action.

8.7.1.2. Reinstatement. Annotate on AF Form 3616, *Daily Record of Facility Operation:*

- Who is performing the special evaluation.
- Who the special evaluation is being conducted on.
- Positions the special evaluation is being conducted in.
- Reason for the evaluation.
- Document all special evaluation results on AF Form 623a or suitable substitute. Retain for 1 year after reinstatement or until an annual evaluation is complete whichever is sooner.

Chapter 9

ATC WITHDRAWALS

9.1. Withdrawal From ATC Duty. ATC managers must identify substandard controllers to the squadron commander at the earliest time. When withdrawal, disciplinary, or other administrative actions are appropriate, do not allow one action to substitute for or delay the other. The MAJCOM OPR for ATC will make the final determination of the category of withdrawal. AFI 36-2108, *Airman Classification*, requires controllers to have an FAA ATCS certificate. ATCS certificate withdrawal applies to any person holding a 1C1X1 or 13MX primary or secondary AFSC or civilian equivalent (GS 2152).

9.1.1. (Added-AFMC) AOF/CC, CCTLR or ATC Examiner will immediately suspend all certifications of a controller who has been recommended for withdrawal from ATC.

9.2. Withdrawal Categories. Air traffic controller withdrawals fall under three categories: AFSC withdrawals for failure to obtain or maintain a rating, ATCS certificate withdrawals for failure to maintain mandatory qualification standards other than medical, and ATCS certificate withdrawals for medical. Controller withdrawal may be for the following reasons.

9.2.1. Failure to Obtain (or Maintain) a Rating (FTOR) (attachment 4). Use these procedures for controllers in upgrade and qualification training. Do not recommend controllers for AFSC withdrawal until adequate training and evaluations substantiate their FTOR. ATC managers may base withdrawal action on a controller's inability to complete the facility's radar simulator training program, if the simulator problems are not more difficult than actual routine traffic.

9.2.2. ATCS Certificate Withdrawal (attachment 5) Determination that a condition exists which could affect flying safety and ATCS certificate withdrawal is necessary.

9.2.3. Drug Use or Abuse (DA) (attachment 7). DA is inconsistent with US Air Force policies and discharge of individuals from the Air Force will result in most cases. According to AFI 36-2701, *Social Actions Program*, controllers involved with drugs will have their ATCS certificate suspended pending the outcome of the commander's evaluation. A commander's decision to retain the controller requires close coordination with the flight surgeon, rehabilitation committee, and the base legal office. Conviction of any federal or state statute relating to drugs, as defined in FAR Part 65.12, is grounds to withdraw a controller's ATCS certificate.

9.2.4. Alcohol Abuse (attachment 8). Involvement in an alcohol-related incident may be grounds for ATCS certificate withdrawal. Commanders must evaluate each case and determine if withdrawal action is appropriate.

9.2.4.1. Commanders will refer to the flight surgeon individuals involved in alcohol-related incidents and initiate the alcohol abuse rehabilitation evaluation process (AFI 36-2701). When individuals do not meet the most current, Air Force Surgeon General approved, Diagnostic and Statistical Manual (DSM) of mental disorders diagnostic criteria for alcohol dependence or alcohol abuse the commander may return them to duty, if the flight surgeon agrees they are not a hazard to flying safety, or recommended them for withdrawal, if deemed appropriate.

9.2.4.2. If the commander determines that an alcohol-related incident represents only a disciplinary problem, the commander will educate the individual through alcohol awareness education and return the individual to duty.

9.2.4.3. If entered into alcohol abuse rehabilitation, the commander may continue the controller in duty status, let the controller work positions with a trainer or monitor, or suspend the controller from ATC duty during rehabilitation.

9.2.4.4. Individuals who meet the most current version of the DSM diagnostic criteria for alcohol abuse or alcohol dependence will be DNIC until medically disqualified or granted a waiver by the MAJCOM Surgeon General. Commanders may request a waiver for alcoholism or alcohol abuse if administrative withdrawal is not appropriate and the following criteria is met.

9.2.4.4.1. The substance abuse recommendation and treatment (SART) committee determines that the individual has made satisfactory progress.

9.2.4.4.2. Individual has maintained abstinence from alcohol without needing medication for a period of 6 months from the date of entering the Track 4 treatment phase of the SART program. ***NOTE:*** Any slips of abstinence during the SART program resets the 6-month observation period for waiver consideration.

9.2.4.4.3. In the opinion of the flight surgeon, psychiatrist or clinical psychologist, and the unit commander, and based on the SART Treatment and Progress Evaluation, the individual has a low potential for regression and can be expected to remain stable under stress.

9.2.4.4.4. The individual has no medical complications or conditions that are a result of past alcohol abuse or dependence.

9.2.4.4.5. The individual states in writing that they understand the waiver is valid only if total abstinence from alcohol is maintained, and that a verifiable break in abstinence once the waiver period has begun is considered medically disqualifying and not waiverable.

9.2.4.4.6. To ensure unit commanders are aware of the need to observe individuals with past alcohol problems, new commanders are briefed on those in their units with waivers when the individual changes assignment or there has been a change of command.

NOTE:
Documentation of these conditions must be submitted with the waiver request.

9.2.4.5. Unit actions following waiver approval.

9.2.4.5.1. Reinstate ATCS certificate and return individual to ATC duties.

9.2.4.5.2. Monitor the individual until satisfactory completion of a special evaluation.

9.2.4.5.3. An individual on a waiver for alcoholism or alcohol abuse must abstain from the use of alcohol. Evidence that an individual violates this provision is cause for immediate suspension and ATCS certificate withdrawal.

9.2.4.5.4. Submit a withdrawal package when an individual refuses or is incapable of completing alcohol abuse rehabilitation.

9.2.5. Character and Behavior Disorder (CBD) (attachment 9). Character and behavior disorders are medically disqualifying only at the time of initial selection (up to six months from initial oath) for

ATC duty. These disorders may be detrimental to the individual's performance of ATC duties and a hazard to flying safety. If this is the case, consider administrative withdrawal of the controller's ATCS certificate. Job performance and overall behavior are key assessments.

9.2.6. Fear of Controlling (FOC) (attachment 5). FOC is a nonmedical term for a simple phobia as listed in the most current, Air Force Surgeon General approved version of the DSM. It is medically disqualifying, and a military psychiatrist or psychologist must diagnose this condition. If a controller professes a fear of controlling the commander will accomplish the following:

9.2.6.1. Suspend the individual's ATCS certificate.

9.2.6.2. Refer the individual to the flight surgeon and to a military psychiatrist or psychologist for evaluation.

9.2.6.3. If the military psychiatrist or psychologist does not diagnose the individual as suffering a simple phobia, as listed in the most current version of DSM, and the individual persists in the claim of "Fear of Controlling," find out whether the local flight surgeon considers the individual a hazard to flight safety. In any case, consider the individual as self-eliminating and a potential hazard to flight safety. See paragraph 9.2.2.

9.2.6.4. If the individual does not suffer from a simple phobia and abandons the claim of FOC, then return the controller to duty. A qualified controller must monitor the returned controller in every position until determining control practices are not a hazard to flying safety and the individual successfully passes a special evaluation for each operating position.

9.3. Withdrawal and Reinstatement Procedures and Notification (RCS: HAF- XO]AR]9715):

9.3.1. For Medical Withdrawals, base flight surgeons and clinical representatives process packages directly with the MAJCOM Surgeon General. Notify MAJCOM OPR for ATC of any pending withdrawal actions. Medical Withdrawals will be forwarded according to AFI 36-2101, *Classifying Military Personnel.*

9.3.2. MAJCOM OPR for ATC will:

9.3.2.1. For FTORs, recommend AFSC withdrawal or reinstatement action to MAJCOM DP personnel.

9.3.2.2. For all other categories (other than medical), including drug use or abuse and alcohol abuse, notify MAJCOM/DP of the ATCS certificate withdrawal so they can initiate action to remove the AFSC.

9.3.2.3. In all cases, inform MAJCOM/DP whether or not the withdrawal action should be for "Cause" and, if appropriate, recommend termination and/or recoupment of the selective reenlistment bonus (SRB).

9.3.2.4. Notify AFFSA/XA of completed withdrawal action. Include the following information:

- Name, rank, and SSN.
- Skill level (3,5,7, or 9), not applicable for officers.
- Reason for withdrawal.
- If trainee is a 3 level and the reason is FTOR, add the date entered training in the facility and the date entered training in the last position.

- Date of controller suspension.
- Location and facility assigned.
- Whether withdrawal was for cause.

9.3.3. Certificate Withdrawal:

9.3.3.1. The commander will ensure the CCTLR voids the controller's ATCS certificate. In the event the AOF is withdrawn, the commander will void the ATCS.

9.3.3.2. The commander notifies the individual in writing of revocation of authority to wear the ATC badge and ensures placement of a copy of the letter in the individuals personnel records.

9.3.3.3. Certificate Reinstatement. Commanders must reinstate the controller and follow the specific instructions of MAJCOM OPR for ATC.

PART 4

ADMINISTRATION

Chapter 10

ATC PUBLICATIONS

10.1. Use of This Instruction. This instruction supplements Federal Aviation Administration (FAA) handbooks, orders, and publications, which prescribe phraseology and procedures for providing ATC services. Use this instruction and applicable FAA phraseology and procedures except as indicated below.

10.1.1. National regulations or agreements adopted for US Air Force use in overseas areas take precedence over this instruction. Refer conflicting procedures to higher headquarters for review and direction. Include host nation procedures, adopted for US Air Force use, in MAJCOM supplements.

10.1.2. Host regulations and procedures apply to Air Force controllers who augment a civil or foreign ATC facility.

10.1.3. Air Force controllers who augment a facility operated by another branch of the US military will comply with the ATC regulations and procedures of the host service branch.

10.1.4. Commanders may authorize specific deviations within their area of responsibility when responding to immediate tactical requirements. Process deviations which go beyond immediate tactical requirements according to paragraph 10.2.

10.1.5. AFI 13-203 is for peacetime operations only and should be used as a guide for establishing procedures during contingency operations.

10.1.6. Commanders may direct otherwise during combat.

10.2. Waivers and Recommended Changes. The OG/CC will forward waiver requests concerning ATC to the MAJCOM OPR for ATC. Waiver requests must include a complete justification statement and alternative procedures that ensure an equivalent level of safety is maintained. Consider sending waivers that have an impact on flight safety through MAJCOM ATC and operator OPRs. If the MAJCOM favorably endorses the waiver, they recommend action and send it to AFFSA/XA. Send requests involving Air National Guard ATC facilities through ANG/XOBO.

10.2.1. AFFSA/XA normally grants waivers for 2 years. MAJCOMs may approve temporary waivers for issues which their units can resolve within 6 months. Waiver renewal requests shall reach MAJCOM NLT 60 days prior to expiration.

10.2.2. Send recommendations for changes to this instruction on AF Form 847, **Recommendation for Change of Publication** or official letter through MAJCOM OPR for ATC to AFFSA/XA.

10.2.3. Special Use Airspace Waivers: The OG/CC will forward SUA waivers directly to MAJCOM. Approved waivers to AF directives must be made available to all agencies affected by the waiver.

10.2.4. During contingency operations the Air Force Forces (AFFOR) staff or designated representative has approval authority for procedures and waivers for operations in their area of responsibility (AOR).

10.2.5. (Added-AFMC) Units will submit waiver renewal requests for procedural or operational issues to HQ AFMC/DOA 150 days prior to waiver expiration dates. NOTE: 120 days for HQ AFFSA/FAA processing and 30 days for HQ AFMC/DOA review and coordination.

10.3. Conflicting Directives. Units affected by FAA orders, notices, or other related ATC directives not implemented by the Air Force must send such directives, through MAJCOM channels, to AFFSA/XA for resolution.

10.4. ATC Publications. Publications in attachment 1 must be available in the ATC Operations Office. CCTLRs will ensure appropriate publications necessary to provide ATC services are available in each facility. MAJCOMs with overseas bases (PACAF, USAFE, etc.) may exclude specific required publications, by location, if corresponding host nation procedures take precedence.

10.4.1. FAA publications listed in Attachment 1 apply to Air Force, Air Force Reserve, and Air National Guard ATC facilities. Use Attachment 1 to cross reference FAA terms from FAAO 7210.3.

10.5. Local Operating Procedures (LOP). Each regulatory instruction issued to an ATC facility must be in a memorandum of agreement (MOA), memorandum of understanding (MOU), letter of agreement (LOA), operations letter, operating instruction (OI), base airfield operations instruction, or operations plan (OPlan). (See Attachment 16 for required LOPs and base airfield operations instruction items). Send local ATC operating procedures, except administrative and facility operating instructions which address administrative matters only, to the host MAJCOM ATC OPR for approval before publication. This includes base and unit level instructions that have ATC taskings. When forwarding LOPs for approval, attach a cover letter that describes each change along with background rationale for each change. LOPs must have MAJCOM approval prior to the effective date and signature.

10.5.1. Use MOUs, MOAs, and LOAs between Air Force units or agencies on a particular base and a non-Air Force agency from the base, or any unit or agency from another location. See FAAO 7210.3 for additional guidance. The MAJCOM OPR for ATC coordinates, reviews, and approves ATC MOUs, MOAs, and LOAs between the Air Force and a host country. Establish procedures in MAJCOM supplements to this instruction (AFI 51-701, *Negotiating, Concluding, Reporting, and Maintaining International Agreements*).

10.5.2. Use operations letters between ATC facilities, or between an ATC facility and another Air Force base agency to supplement operational or procedural instructions and to standardize operations. Describe special operating conditions or ATC procedures that are peculiar to a certain location.

10.5.3. Use operating instructions to regulate and standardize administrative practices.

10.5.4. Use the base airfield operations instruction as a source document for local ATC situations and procedures. A list of minimum required items is in attachment 16.

10.5.5. Use of an ATC annex in an OPlan usually pertains to specific situations, such as anti hijack procedures or the wartime role of ATC facilities.

10.5.6. (Added-AFMC) Number operating instructions according to subject series. Refer to AFI 37-160, Vol. 6, The Air Force Publications and Forms Management Programs--Numbering Publications.

10.5.7. (Added-AFMC) Temporary ATC instructions, written by ATC management, expire after 120 days and must be incorporated in LOPs if instructions are still valid.

10.6. Current Indexes. Each ATC operations office and facility must maintain a current index of applicable LOPs. Forward copies of current indexes to MAJCOM every year (month determined by individual MAJCOMs). Index should include date of LOP, date of LOP review, and date of MAJCOM approval.

10.6. (AFMC) Forward current indexes to HQ AFMC/DOAC in February of each year.

Chapter 11

MANAGING ATC INFORMATION

11.1. ATC Forms. Maintain all forms as official facility records according to AFMAN 37-138, *Records Disposition--Procedures and Responsibilities*. See FAAO 7210.3 for guidance concerning preparation of facility records.

11.1. (AFMC) All air traffic control facilities will retain AF Form 3616, Daily Record of Facility Operations and AF Form 3626, Position Log for one year.

11.1.1. If not already on requirement for FAA Forms or publications, order these through the base publications office or the nearest FAA facility.

NOTE:

Checklists outlined in the attachments to this publication must be printed as overprints to an existing General Purpose form.

11.1.2. FAA Form 7230-7-2, Flight Progress Strip (Automated), or 7230-8, Flight Progress Strip. Use to record data on air traffic movements and clearances according to FAAO 7110.65.

11.1.3. AF Form 3616, Daily Record of Facility Operation. Each WS or SC who performs supervisory duties for all or any portion of a shift signs the AF Form 3616 when completing their portion or shift. Their signature certifies the entries are correct and the form contains all required entries. Document all abnormal conditions and occurrences. Make entries to describe all departures from normal operations and include the operating initials of the controller making the entry when other than the WS or SC.

11.1.3. (AFMC) CCTLRs determine whether to use one form per day or one form per shift. CCTLRs must review and initial each form daily. Provide written comments on the form or, if appropriate, attach a "memo for record" to the form citing entries, which require follow-up action.

11.1.3.1. The initial entry in the remarks section must show the exact time the WS or SC accepts responsibility for the facility. Document temporary absences during the shift unless you can immediately recall the controller to duty.

11.1.3.2. If other than the controller identified on the duty schedule performs duties as WS or SC, make an entry to show who is responsible for the facility.

11.1.3.3. Use only authorized Air Force, FAA, and International Civil Aviation Organization (ICAO) abbreviations and phrase contractions. Define local abbreviations in an operating instruction.

11.1.3.4. CCTLRs may authorize use of this form to log position times instead of AF Form 3626, **Position Log**. The CCTLR specifies which form to use and procedures for logging the position times. Use of either form will be consistent throughout the facility (use AF Form 3616 all the time or AF Form 3626 all the time).

11.1.3.5. Individuals may use a computer to make entries on AF Form 3616. Use a standard Air Force electronic AF Form 3616. When using a computer, a WS or SC who is relieved prior to the end of the watch must enter their first name initial and last name and indicate transfer of responsi-

bility for the watch on the AF Form 3616 (e.g. “1310 M. DAVIS OFF, NT ON AS WS”). Entering the name of the relieved WS or SC serves the same purpose as signing the certification statement at the top of the actual form. The WS or SC responsible for the watch, when the form is printed, must sign under the certification statement at the top of the form. After a hard copy of the log is printed and signed the WS or SC must delete the computer file. Individuals may correct or reaccomplish entries before making a hard copy but must not change the entries of a previous WS or SC without their consent.

11.1.4. AF Form 3626, Position Log. Use a single copy of this form to record individuals responsible for each operating position. Controllers responsible for an operating position must place their operating initials on this form at the time they assume responsibility for the position. If assigning a trainee to a position, enter their initials on the form followed by the controller's operating initials. CCTLRs may specify multiple positions to use a single position log, each position using one side of the form (positions that are side by side, simulator positions, etc.). The WS position does not require a position log.

11.1.5. AF Form 3624, Equipment Outage Log. Use of this form is optional. Use it to record equipment outages or malfunctions and maintenance notifications. Use one form until filled, or as desired by the CCTLR. Transfer open entries when starting a new log. Facilities not using this form must record equipment outages on AF Form 3616.

11.1.6. AF Form 3615, Required Data for Performing PAR Alignments. CCTLRs use this form to record PAR alignment voltage computations. Get correct voltages from maintenance personnel. Maintain one copy on file and provide extracts for controllers' use during PAR alignments.

11.1.7. NIMA DMA Form 8210-4 Request for Aeronautical Video Maps

11.1.8. FAA Form 6050-4 Expanded Service Volume Request

11.1.9. FAA Form 8240-22 Facility Data. Provide all source documents for information contained in this form. If the source documents are not available, coordinate with MAJCOM for airfield/ NAVAID survey and maintain as source document. Forward copy of source documentation with FAA Form 8240-22, facility data sheets, to MAJCOM for inclusion in the FAA data base.

11.2. Recorded Records. Retain all recorder tapes (analog and digital)/cassettes and data extraction disc recordings for a minimum of 15 days. Facilities equipped with automated radar systems shall retain all console typewriter printouts (or stored capture files if the feature is available) for a minimum of 30 days. The CATCA will review all printouts or stored capture files for system abnormalities and occurrences. Review and documentation procedures of console data printouts or stored capture files shall be contained in a facility directive. Protect recorded records of aircraft mishaps, alleged deviations, or hazardous air traffic reports (HATR) to the degree necessary to prevent unauthorized access. Facilities equipped with automated radar systems will also protect console data printouts (or stored capture files) and printed data reduction hard copies. Locked receptacles (file cabinets, desks, or safes) are adequate for storing this material.

11.3. Charts, Maps, Publications, and Instruction Files. Each ATC facility must maintain current Flight Information Publications (FLIP) documents pertinent to their area of responsibility. They must also display their area of control and depict the location (bearing and distance) and frequency of each NAVAID. Non-approach control towers and RFC facilities are exempt from displaying their area of con-

trol. CCTLRs and the CATCA will provide a recent information file which may be a folder, clipboard, or binder. CCTLRs will develop a suitable ready reference file or display for each operating position. CATCAs will develop a suitable ready reference file or display for use by AUSs for each supported automated system. This information is to provide the controller with an immediate reference source to confirm data or to get little-used information. Define, identify, and maintain local procedures or instructions supplementing handbook material pertinent to an operating position. For example: the RAPCON departure position ready reference file or display would contain those portions of a letter of agreement, operations letter, etc., affecting departure procedures. CCTLRs determine what material is applicable to each operating position.

11.3.1. Control towers must maintain:

- On base crash grid maps (off base, when available).
- Airport diagram (runways, ramps, barrier or arresting gear, blind spots, overrun information, precision approach critical areas, etc.).
- Visibility checkpoint chart(s) (day and night).
- Current sunrise and sunset tables.
- Photographs of Bright Radar Indicator Tower Equipment (BRITE) or Digital BRITE (DBRITE) adjusted to optimum presentation with correct video map alignment (not required when the BRITE or DBRITE operates off a digitally remoted narrow band system).
- Intersection takeoff diagram (at locations which authorize intersection takeoffs). Show the remaining runway length from each authorized departure intersection. Show all unauthorized departure intersections on the diagram. Example: /NO TAKEOFF/. Combine the intersection takeoff diagram with the airport diagram, when possible. Get measurements from an official source and record them on the diagram, reduced to the lower fifty foot increment. Publish intersection takeoff diagram in the base airfield operations instruction.
- Airfield lighting control operating instructions.

11.3.2. Radar facilities must maintain:

- A runway diagram for each airport served. As a minimum, include length and width, barrier or arresting gear, and overrun information.
- A minimum vectoring altitude chart covering the range of the primary radar system or area of facility responsibility, whichever is greater (not applicable to RFC facilities). Prepare charts according to AFMAN 13-209, Instrument Procedures Design and Publication.
- Photographs of radar scopes adjusted to optimum, showing position of radar reflectors, permanent echoes and video map and cursor alignment.
- Minimum IFR altitude chart, establishing common minimum altitudes for the area or sectors, as appropriate. Charts should be as simple as possible and still allow efficient traffic flow (not required for GCA or RFC facilities).
- Recommended altitudes for surveillance approaches.

11.4. Service Following an Aircraft Mishap. When a facility, service, or navigational aid is, or is suspected of being involved in an aircraft mishap, the AOF/CC, with the assistance of ATCALS maintenance, determines if equipment performance and alignments are within technical order (TO) specifications. Radar equipment performance checks must include scope, cursor, and map alignment.

The OG/CC determines whether or not to withdraw a facility from service. If it remains in operation, perform an immediate and comprehensive ground check. If equipment is suspect request an official flight inspection. Return a suspect facility to service only after a successful flight inspection.

11.5. Actions Following an Aircraft Mishap. The WS or SC notifies the CCTLR and other persons listed in local checklists and directives. Request an aircraft mishap local weather observation. Remove, label, store, and safeguard pertinent recording tapes (analog and digital), cassettes, and discs. Coordinate facility and runway status with other ATC agencies and request necessary NOTAMs.

11.5.1. As soon as possible after being notified of an aircraft mishap, the AOF/CC or CCTLR will determine controller involvement. If the AOF/CC or CCTLR suspects a controller contributed to a mishap, or questions a controller's capability to control traffic, they must remove the controller from ATC duties pending a flight surgeon's evaluation. (Reschedule the controller for duty only after getting clearance from the local flight surgeon.) Safeguard written facility records, including events log, position logs, flight data strips, and weather data.

11.5.2. Continuous Data Recording (CDR) data of automated radar systems may be used in the investigation of reported incidents believed to be operational errors/deviations to determine the amount of separation that existed or position of the aircraft. CDR data may not be used as the primary source for reporting an incident or commencing an investigation. When CDR data is used in this capacity, the automated system clock shall be verified as accurate and each plotted target verified as valid.

11.5.3. (Added-AFMC) During duty hours (0730-1700, Eastern Standard Time), telephonically notify HQ AFMC/DOAC, DSN 656-0059, commercial (937) 656-0059, of all aircraft mishaps and HATRs using the format in Attachment 18. During non-duty hours, telephonically notify 88 ABW Command Post, DSN 787-6314/6315, of HATRs and aircraft mishaps addressing Items 1 through 7 and Item 13 contained in Attachment 18.

11.6. Retaining Records. AOF/CCs file and maintain official copies of written and recorded records pertinent to an alleged flying deviation or hazardous air traffic reports for 6 months. File and maintain copies of written and recorded records about aircraft mishaps or accidents for 2 years according to AFMAN 37-138. This file may contain the originals or certified copies. In addition, keep other data, such as crew duty schedules, controller training records, pertinent medical data, etc., used in the investigation which the government might require to defend air traffic control in law suit actions. This file should contain only factual data that is generated in the ordinary course of business; it should not contain unsworn controller statements, summaries of events, opinions and recommendations, or privileged safety information.

11.6.1. The AOF/CC is custodian for recorder voice tapes (analog and digital)/cassette and data extraction disc recordings in Air Force ATC facilities.

11.7. Releasing ATC Information. Persons conducting an official safety investigation of an Air Force mishap (Air Force Safety Board Members) have access to all factual and non-factual information pertinent to an aircraft mishap. These people may interview controllers and request controller statements or controller testimony during their investigation. AFI 91-204, *Safety Investigations and Reports*, protects controller statements and testimony made during the safety investigation from public disclosure. Review AFI 91-206, *Participation in a Military or Civil Aircraft Accident Safety Investigation*, before releasing information concerning an aircraft mishap.

11.7.1. The purpose of accident investigations under AFI 51-503, *Aircraft, Missile, Nuclear, and Space Accident Investigations,* is to gather evidence for claims, litigation, disciplinary and adverse administrative actions, and for all purposes other than mishap prevention. These investigators have access to factual data pertinent to the accident. They may also interview controllers and get controller statements or testimony. Statements and testimony made during aircraft accident investigations are releasable to the public under the FOIA. Controllers may seek legal counsel before making statements or providing testimony to accident investigators .

11.7.2. Factual records about hazardous air traffic reports, near midair collision reports, systems errors, or deviations are releasable to any government agency conducting the investigation without reference to AFI 91-206 and the FOIA. AOF/CCs should cooperate to the maximum extent possible to make factual information available to the investigating agency. The investigator may also require controller statements as supplemental information to aid in the investigation. Controller statements should contain factual information only.

11.7.3. FAA, National Transportation Safety Board (NTSB), and Air Force investigators have access to factual records pertinent to an alleged violation of flying regulations. Provide factual records to the FAA agency and an Air Force board investigating the alleged flying violation without reference to AFI 13-201 and the FOIA. These investigators may request controller statements or testimony. Controller statements and testimony made during this type of investigation are releasable to the public. Controllers may seek legal counsel before making statements or testimony to accident investigators. Do not release pilots' names without the specific approval of HQ USAF/XOO. See AFI 13-201, *US Air Force Airspace Management,* for additional guidance.

11.7.4. The Department of the Air Force discloses its records to the public, unless these records are exempt from public disclosure. AFI 37-131, *Freedom of Information Act Program,* outlines procedures for disclosure of records and lists specific exemptions for withholding records. Process any nongovernmental request that cites the Freedom of Information Act through the wing or base FOIA office.

11.7.5. Handle requests for classified or unclassified data from foreign governments or their representatives, including host nation mishap investigation teams, through foreign disclosure policy channels according to AFI 16-201, *Foreign Disclosure of Classified and Unclassified Military Information to Foreign Governments and International Organizations*. MAJCOMs will define the process for handling requests by foreign governments.

11.8. Removing Original Records. Do not release recorded or written records concerning mishaps without authority from the OG/CC. Release the original voice recording for official use to a recognized investigation authority. Keep a copy of the original recording with the custodian. NOTE: In accordance with FAA guidance, a DAT recording derived from the hard drive of the DVRS certifies as an original recording.

11.8.1. At joint-use RAPCONs, where the US Air Force has furnished recorder equipment, the FAA maintains custodial control of recordings. If the Air Force requires access to a tape of one of its positions in the facility, the FAA plays back the recording. If the mishap involves an FAA controller, the FAA provides a copy of the original voice recording for the use of investigators.

11.8.2. If there is a need for a transcript or an additional tape copy, make it from the original recording. Only two certified re-recordings of the original (DAT) recording should be made. Any addi-

tional re-recordings should be made from a certified copy of the original. When making a tape copy include all transmissions from initial call-up to at least 5 minutes after last contact. Use the speaker-to-microphone (GSH 57/58 Stancil Recorders) method to copy when the equipment will not electronically connect. Preface the reproduction with a statement containing the information in paragraph 11.9.3. Also include the date and time of reproduction, the name of the person supervising the reproduction, and a certification that the reproduction is a true copy of the original recording.

11.8.3. The data extraction recordings of automated radar systems to a computer extraction disc are normally useless to a requesting party unless reduced to a printed hard-copy form. Therefore, when filling a request for computer data, the disc will be reduced to printed form. After a successful reduction to printed form, the disc may be returned to service through the normal rotation cycle unless a specific request is received to retain the disc in its entirety. The following disclaimer will be attached to any computer reproduction: "THIS DOCUMENT IS DERIVED FROM COMPUTER MAGNETIC RECORDINGS OF INTERNAL COMPUTER PROCESSING. IT IS NOT AN EXACT REPRESENTATION OF THE CONTROL POSITION DISPLAY." The printout data is considered a permanent record and shall be retained in accordance with aircraft mishap/accident procedures established in paragraph 11.6.

11.9. How To Prepare Transcripts:

11.9.1. Include the following:

- Subject.
- Identity of the recording facility.
- List of facilities and controller positions, and the abbreviation for each.
- Frequency, landline, or position being recorded.
- Date and time covered by the transcript.
- Source of time entries; for example, time announcer, radio broadcast, reconstruction from timing tape, etc.
- Certification statement (paragraph 11.9.3).

11.9.2. Abbreviate each facility in the transcript by using the location designator, followed by the facility and controller position. Identify aircraft by an abbreviated call sign if confusion will not result. Precede each transmission with the identity of the transmitting source. When the source is unknown, use UNK. Single space the body of the transcription. Double space between each transmission. Show breaks in the continuity of transmissions by a series of asterisks. Make time entries at intervals of 1-minute or less.

11.9.3. Certify copies of written records or tape transcripts as follows:

"I certify this to be a true and exact copy of the original record on file at this office"; or "As custodian of the original recording, I certify this to be a true and exact (copy or transcript)."

(Name and Grade)

(Title)

11.10. Tape Recording Analysis. US Air Force and FAA safety boards may require tape recording analysis to determine the content of a tape. The boards normally begin the process for analysis. Make

and keep a duplicate tape before releasing the original recording to the safety board. When a unit requires tape recording analysis, not under the auspices of a formal investigation, AFFSA/XA may get this service from HQ FAA or the Federal Bureau of Investigation. In these instances, make a duplicate recording on cassette and keep it locally until return of the original. Send the original tape via registered mail or courier along with a letter explaining the reason for the recording analysis to the MAJCOM OPR for ATC. MAJCOM will send the request to AFFSA/XA.

11.10.1. Pack tape reels so there is adequate clearance between the reel and the box to prevent crushing the tape reel and tape. Attach this warning to the container: MAGNETIC TAPE. KEEP AWAY FROM X-RAY OR MAGNETIC SOURCES.

11.11. Displaying and Retaining Weather Data. Display current observations and pertinent severe weather warnings, advisories, and pilot reports so they are easily readable from all controller positions. Where this is not possible, set up coordination procedures to ensure changes to the weather promptly reach each controller position.

11.11.1. File note pads and flight progress strips, used to record weather data, according to AFMAN 37-138 except when the weather information is entered on official forms, received by weather dissemination systems, or retained at a weather service agency servicing the base.

11.12. Facility Security. The CCTLR must secure the ATC operating area. Install a cipher lock or other suitable locking device at initial entry points to control towers and radar facilities. Install similar devices at the main entry point to the control tower cab and the radar operations room. Secure these devices at all times. Secure other entry points to the tower cab and radar operations room with manual devices, such as dead bolts, locks, hasps, etc. Secure mobile radars and towers to the maximum extent possible.

11.13. Revisions to Flight Procedures. AOF/CC will submit an AF Form 813, **Request for Environmental Impact Analysis**, for all revisions to flight procedures.

11.14. Civil Aircraft Deviations. AOF/CC report alleged deviations by civil aircraft to the nearest General Aviation District Office, Flight Standards District Office, Air Carrier District Office, or equivalent host nation agency.

11.15. Changes in ATC Mission. MAJCOMs approve changes in the ATC mission of their units. This involves adjustments in manpower, equipment requirements, issues of operational impact, or military interface or services with civil or host nation operations. Coordinate changes in approach control services, within the NAS, with the Air Force Representative (AFREP) at the appropriate FAA region.

11.15.1. When notified of a Mission Design Series (MDS) change, the OG and OSS Commander must ensure the following actions, as a minimum, are taken prior to the arrival of new aircraft:

- Provide aircraft characteristics training to all controllers.
- Develop radar simulator training scenarios for USAF radar controllers that emphasize integration of the new MDS aircraft operations with existing operations.
- Develop static lab training scenarios for control tower controllers that emphasize interaction of new MDS aircraft operations with existing operations.
- Develop comprehensive pictorial and written guidance on new MDS, aircraft patterns, profiles and procedures.

- Ensure all controllers are exposed to new MDS aircraft through live training prior to full operations. The intent is to allow tower controllers to acquire a visual concept of profiles and procedures flown by new MDS aircraft.
- Review TERPS criteria.
- Update existing LOPs to include procedures for new MDS aircraft.

11.16. Military Facility Deviation (MFD) Reports (RCS: HAF-XO[AR]9350). When a unit receives an MFD or host nation equivalent report, the AOF/CC must investigate and send results, along with a copy of the report, to the MAJCOM OPR for ATC within 7 duty days after receipt. Final response must include a brief summary of the event, probable cause, and corrective action taken (do not include any personnel actions taken beyond general statements about additional training for an individual involved). This report is designated emergency status code C-2; continue reporting during emergency conditions, normal. Do not report by message during MINIMZE.

11.17. Explosive Detection K-9 Teams.

11.17.1. CONUS ATC locations will take the following actions if they receive a civil aircraft request for the location of the nearest explosive detection K-9 team:

11.17.1.1. Relay the pilot's request to the FAA Washington Operations Center, ADA-30, telephone (202) 863-5100 or DSN 667-5592, providing the aircraft's identification and position.

11.17.1.2. ADA-30 will provide the ATC facility with the location of the nearest K-9 team. Have ADA-30 standby while the information is relayed to the pilot.

11.17.1.3. After it has been determined that the aircraft wishes to divert to the airport provided, the ATC facility will ascertain estimated time of arrival and advise ADA-30.

11.17.1.4. If a military installation has an explosive detection K-9 team, during emergency situations and with the concurrence of base officials, advise the pilot that such service is available.

11.17.2. Overseas ATC facilities receiving a request from a military or civil aircraft must take action according to local resource protection plans and guidance received from local military authorities.

11.18. Military Air Traffic Activity Reports (RCS: HAF-XO[Q]9352). AFFSA/XA serves as the focal point for gathering, compiling and disseminating air traffic activity reports. AFFSA/XA provides composite reports to HQ USAF, MAJCOMs and all others as requested. This report is designated emergency status code C-2; continue reporting during emergency conditions, normal. Do not report by message during MINIMIZE.

11.18.1. Submitting Reports: ***NOTE***: Reports are based on the fiscal year.

11.18.1.1. Units: Submit unit reports quarterly using the Air Traffic Activity Reporting System (ATARS). Send reports to MAJCOM OPR for ATC not later than 10 workdays after the quarter ends.

11.18.1.2. MAJCOMs. Submit consolidated unit quarterly reports using ATARS. Send reports to AFFSA/XA not later than 30 days after the quarter ends. Reports may be forwarded to AFFSA/XA on computer diskette or electronically transmitted (e.g. EMail).

11.18.2. Focal Points. MAJCOMs, in coordination with AFFSA/XA, approve counting activities in the "Special Use" sub-category. MAJCOMs act as a focal point for units to resolve problems with ATARS. AFFSA/XA acts as the focal point for MAJCOMs to resolve problems with ATARS.

11.18.3. Use of Forms. Units shall document daily, monthly, and quarterly air traffic activities using the ATARS. AF Form 3623, Daily Traffic Count, may be used as a separate backup to the automated report program but not in lieu of it.

Count air traffic activity in four 6-hour periods per day beginning at 0000 local. Control towers record a count of one for each aircraft in the formation regardless of the category, type, or approach being conducted. When controlling a formation through instructions to a single aircraft within the flight, radar facilities will record a count of one for the flight for each category, type, or approach being conducted. When formation flights are split into smaller formations or single aircraft, record a count of one for each formation or single aircraft for each category, type, or approach being conducted. Count aircraft operations according to category, type of activity and type of approach.

11.18.3.1. Reports shall include the following information:

- Separate categories for military, civil general aviation, and air carrier/air taxi, and other (tower only) activity.
- eparate sub-categories to count the type activity in each category.
- IFR arrivals (tower and radar)
- IFR departures (tower and radar, excluding RFC).
- VFR local and VFR itinerant (Control Tower).
- VFR service over-flights, PAR, ASR, and ILS or MLS (RAPCON, GCA).
- Special Use (Tower and Radar).

11.18.3.2. Categories (defined):

- **Military.** Aircraft belonging to a nation's armed forces.
- Civil General Aviation. Aircraft of any national registry operated by a private person, company, public company, government agency, or flying club not conducting air carrier or air taxi operations.
- Air Carrier or Air Taxi. Aircraft conducting operations for compensation or hire. For example, TWA, LOGAIR, Federal Express, and charter services such as Tango Cessna 9751T.
- **Other.** Operations wherein a VFR Tower receives a point-out or Approval/Request (APREQ) for an IFR aircraft executing an instrument approach to another (adjacent) airport or as otherwise coordinated and approved for use by MAJCOM. NOTE: This area constitutes a non-countable category and values tabulated in this area will not affect the “Type Operations” sub-categories totals (i.e., IFR arrivals, IFR departures, VFR itinerant, etc.).

11.18.3.3. Types of Activity (defined):

- **IFR Departure.** IFR or Special VFR departures and IFR, Special VFR, or VFR aircraft flying an instrument approach which terminates in other than a full-stop landing and continues to receive IFR service.

- IFR Arrival. IFR, Special VFR, and VFR aircraft which fly an instrument, visual, or contact approach to an airport or point-in-space.
- VFR Local (Tower Only). VFR aircraft which arrive or depart an airport served by the control tower.
- VFR Itinerant (Tower Only). VFR aircraft which originate outside Class D airspace and fly through it without making an approach.
- VFR Service (Radar Only). VFR aircraft which receive services but do not make an instrument approach.
- Over-flight. IFR or Special VFR aircraft which originate outside the area of jurisdiction and fly through the area without flying an approach.
- Special Use. Aircraft that conduct activities in airspace of defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities. Count activities conducted in alert areas, controlled firing areas, military operations areas, prohibited areas, restricted areas, and warning areas as special use operations. Any other area(s)/activity(ies) not listed requires MAJCOM approval.

11.18.3.4. Types of Approach:

- PAR. Any aircraft that conducts a PAR approach.
- ASR. Any aircraft that conducts an ASR approach.
- ILS or MLS. Any aircraft that conducts an ILS or MLS approach.
- TACAN. Any aircraft that conducts a TACAN approach.

Chapter 12

QUALITY ASSURANCE

12.1. Quality Assurance Programs. There are several programs which ensure the safety and continuous improvement of base level air traffic control services.

12.2. Internally Managed Programs. Are those programs conducted within the AOF. Periodic facility evaluations assess the overall performance of crews and facility standardization. Annual position evaluations assess the individual performance of controllers. Annual AUS evaluations assess each AUS for practical system proficiency.

12.2.1. Periodic Facility Evaluations. The CSE will conduct periodic facility evaluations to ensure adherence to facility operating directives and standard application of procedures. As a minimum, the CSE will observe: crew application of CRM principles, application of standard phraseology, crew change, application of separation criteria, inter/intra facility coordination, position awareness, use of checklists, and weather reporting procedures. Observe each crew at least every 90 days. Document the results of each evaluation and forward to the CCTLR for review or action and to the AOF/CC for review.

12.2.2. Annual Facility Evaluations. The CSE or ACSE will evaluate each controller using a locally developed annual evaluation checklist within 30 days of the anniversary of their initial position certification or last annual evaluation. Document and retain in the individual's training record until the next annual evaluation is accomplished.. Conduct the evaluation during live traffic or a combination of live and simulated traffic.

12.2.2.1. At a minimum, evaluate tower controllers in local control and one other operating position. Additionally, where the position is authorized, evaluate coordinator. Evaluate all certified positions until facility rated.

12.2.2.2. At a minimum, evaluate radar controllers in the following positions: approach control, arrival control, coordinator, and RFC as applicable to the facility. Additionally, evaluate facility rated controllers in at least one assistant position. Evaluate all certified positions until facility rated.

12.2.2.3. Controllers who fail an annual evaluation will have their ratings and certifications for that facility suspended until recertified.

12.2.3. Annual AUS Evaluations. The AUS ACSE will evaluate each AUS annually to ensure automation proficiency and adherence to workcenter operating directives and standard application of procedures. Conduct the evaluation during normal day-to-day operations or by simulated automated system scenarios (i.e., computer system problems, system administration duties, etc.). The evaluation is to be accomplished within 30 days of the anniversary of completion of qualification training or last annual evaluation. Document results of annual evaluations on AF Form 623a to include deficient areas and required corrective actions and retain in the individual's training record until the next annual evaluation is accomplished.

12.3. Externally Managed Programs . Are those programs where an external agency provides an assessment of unit level air traffic services. The Air Traffic System Evaluation Program (ATSEP) is a

USAF program conducted by MAJCOMs. The Air Traffic Control and Landing Systems (ATCALS) Evaluation Program is managed by HQ AFFSA. Combat readiness functions of air traffic services in the AOFs are evaluated as part of the Operational Readiness Inspections (ORI), conducted by MAJCOM IG staffs.

12.3.1. Air Traffic System Evaluation Program (ATSEP). The ATSEP evaluates the ability of USAF air traffic systems to meet standards and operational requirements of civil and military users. All US Air Force, US Air Force Reserve, and Air National Guard locations are subject to this program. Refer to AFI 13-218**,** *Air Traffic System Evaluation Program* for guidance.

12.3.2. ATCALS Evaluation Program. AFFSA/XA investigates and solves ATCALS performance problems. They will systematically evaluate, assess, analyze, document and archive the relationship between equipment performance, the environment (terrain, weather, manmade structures, etc.), and flight evaluation results. AFFSA/XA determines the scope of the requirement and most effective method of accomplishment, establishes detailed objectives, and directs and executes the ATCALS Evaluation Program.

12.3.2.1. MAJCOM Responsibilities:

12.3.2.1.1. Set up an air traffic services and logistics point of contact at MAJCOM for coordinating ATCALS evaluation matters.

12.3.2.1.2. In July of each year, submit to AFFSA/XA a list of ATCALS facilities requested for evaluation during the next fiscal year. Include nominations for baseline and special evaluations. Prioritize the list and provide reasons for needing the evaluation. List the requests in order of priority and include the following:

- Name of base.
- Type of ATCALS to evaluate (type of facility).
- Nomenclature of equipment to evaluate.
- Period to schedule the evaluation, (if applicable).
- Special items of concern, if appropriate. For special evaluations to investigate problems, describe problems and provide a summary of requests for assistance taken.
- Type of evaluation: Special or baseline.

12.3.2.2. Scheduling. The evaluation activity will develop and distribute an annual ATCALS evaluation schedule. Base this schedule on a AFFSA/XA priority list which results from inputs from MAJCOMs and FOAs. The evaluation activity coordinates with the affected units and flight evaluation support activity to set up a schedule which considers evaluation activity team availability, flying mission issues, weather conditions and other activities that would affect evaluation dates. Changes to the schedule will occur as AFFSA/XA receives requests, determines their relative priority, and coordinates with the evaluation activity. This may result in deletions of lower priority evaluations from the schedule. (also see AFI 13-216, *Evaluation of Air Traffic Control and Landing Systems (ATCALS)*)

12.4. Cooperative Quality Assurance Programs . These include Unit Self-Assessments (USA), Operational Readiness Exercises (ORE), Base Exercise Evaluations (e.g. Major Accident Response Exercises (MARE)), support of the wing MACA program, and the Pilot/Controller Liaison Program. These are

overall programs that require the integrated participation of several agencies to successfully implement the program.

12.4.1. USAs, OREs and Base Exercise Evaluations are locally managed. Wing Safety is the OPR for the MACA and BASH programs. The AOF/CC is OPR for the Pilot/Controller Liaison Program.

12.4.2. The Pilot/Controller Liaison Program provides a forum for pilots, controllers, and Base Operations personnel to exchange information and feedback, thereby enhancing the safety and improving services provided in the local air traffic environment. The specific purpose of this program is to facilitate communication and alleviate misunderstandings between the customer (pilots) and the service providers (air traffic controllers and Base Operations personnel). The program enhances the wing MACA program by providing a forum for educating and addressing the concerns of civilian pilots at satellite airports serviced by USAF approach control facilities. While specific requirements for implementation of the pilot/controller liaison program are best determined at the unit level, the following general guidelines are recommended:

12.4.2.1. Assign one primary and one alternate controller liaison to each flying squadron and each satellite airport supported by the AOF. Recommend reciprocal pilot liaisons be identified from each flying squadron to provide a team liaison concept. Liaisons to satellite airports generally coordinate visits/meetings with the airport fixed base operator.

12.4.2.2. Maintain a record of each liaison visit/meeting and topics discussed. Disseminate the results of these discussions throughout the controller/Base Operations work force and to the flying squadrons to facilitate communication/understanding of pilot requirements, services provided by controllers and Base Operations, and system limitation/restrictions. Identify any corrective actions required and continue to track them through closure.

12.4.3. MACA Program. The MACA Program shall be managed IAW AFI 91-202 Paragraph 7.10.

12.5. The Base Airfield Operations Board:

12.5.1. This board provides a forum for discussing, updating, and tracking various activities in support of the wing flying mission. The Base Airfield Operations Board will convene at least once per quarter.

12.5.2. The board is chaired at a minimum by the Operations Group Commander (OG/CC). The board chairperson appoints Base Airfield Operations Board membership to include representation from flying organizations, wing stan-eval, flight safety, ATC operations, airfield management, TERPs, communication units, civil engineering, appropriate FAA or host nation ATC facilities, OSS/CC, a base weather representative, aero club manager (if applicable), and an airspace manager. Appoint members in the base airfield operations instruction.

12.5.3. The AOF/CC prepares the agenda and records the minutes of the base airfield operations board. The agenda should include the following mandatory items and any other pertinent issues the wing deems appropriate:

12.5.3.1. Airspace (terminal, en route, and special use airspace). Requires annual review.

12.5.3.2. ATC/Flying Procedures (new, revised, rescinded and seldom used). Requires annual review.

12.5.3.3. Military, FAA, and/or Host Nation concerns.

12.5.3.4. Airfield Operations Flight (AOF, AM, ATC) Staffing and Proficiency. Report airfield operations staffing and proficiency in two categories: Category I will reflect UMD authorized and assigned. Category II will reflect qualified staffing available and will specify personnel on long term DNIC status, suspended, deployed, pending withdrawal, separating, or PCS, and those personnel assigned or detailed outside primary AFSC longer than 30 days. ***NOTE***: Do not include unqualified (no SEI) 3-levels in overall numbers; report them separately for both categories.

12.5.3.5. ATCALS (flight inspection schedule, problems, status, upgrades).

12.5.3.6. Airfield Environment: A review of airfield activities, problems, and programs such as: number and status of permanent/temporary airfield waivers; status of deteriorating airfield/runway conditions (inspection trends, Foreign Object Damage/tire damage comparisons); trend data collected from pilots, BASH, ATSA/AOSE surveys, etc.

12.5.3.7. Status of flightline driving program (units visited, number of runway intrusions and runway intrusion trends).

12.5.3.8. Hazardous Air Traffic Reports. ***NOTE:*** Be specific on the information provided in the AOB minutes concerning runway intrusions and HATRs.

12.5.3.9. Air Traffic System Evaluation Program. Include the current status of all open ATSA discrepancies in AOB minutes. ***NOTE:*** When AOB minutes include ATSA observations they must be marked FOR OFFICIAL USE ONLY.

12.5.3.10. Annual review of applicable base instructions, Letters of Agreements, Operation Letters, OPLAN taskings, Host Nation Agreements, Terminal Instrument Procedures, Air Installation Compatible Use Zone (AICUZ) (AFI 32-7063), parking plan, etc.

12.5.3.10.1. Review of local aircraft priority procedures. Requires annual review.

12.5.3.10.2. Review NOTAM circuit and AWDS reliability.

12.5.3.10.3. Alternate ATC capability procedures (if applicable).

12.5.3.10.4. MACA. Review semiannually or as mission changes.

12.5.4. Publish items that require annual review in the base airfield operations instruction. Include the month which the items shall be reviewed (see paragraphs 12.5.3.1., 12.5.3.2., 12.5.3.10., and 12.5.3.10.1.).

12.5.5. Distribute Airfield Operations Board minutes to base agencies, command levels through MAJCOM, HQ AFFSA/XA, the AFREP to the servicing FAA region and, if appropriate, ANGRC and HQ AFRC. Distribution above base level will be made within 15 workdays after a board meeting.

12.5.5.1. Include a current list of key personnel with the AOB minutes for MAJCOM to include as a minimum name, rank, position, and phone.

Chapter 13

CONTRACTING ATC SERVICES

13.1. Coordination Requirements:

13.1.1. Unit AOF/CC must inform MAJCOM ATC contract monitors of contract and Performance Work Statement (PWS) proposals, developments, and negotiations. Submit the proposed PWS to the MAJCOM ATC contract monitor for review.

13.1.2. MAJCOMs, AFRC, and ANG, must coordinate all newly proposed and/or revised contracts with AFFSA/XA. Inform AFFSA/XA of the following information prior to contracting facilities or converting to DoD controllers:

13.1.2.1. Proposed contract and PWS dates, location, host unit, and type of aircraft served (contractor name and address, and quality assurance evaluator name and phone number if available).

13.1.2.2. Proposed timetable for transfer of manpower slots, personnel and equipment (transferred wartime tasking and personnel must be trained and ready for deployment) prior to conversion to DoD or contract services effective date.

13.1.2.3. Training impact statement on how the gaining facility will provide an equivalent or higher level of support.

13.1.3. AFFSA/XA will evaluate contract proposals for impact on manpower and wartime requirements.

13.2. Contracting Policy. Within CONUS, HQ USAF and the FAA have agreed the US Air Force may contract only VFR control towers with low density traffic operations. The Air Force may not contract IFR facilities. The ANG is responsible for contracting tower services at Air National Guard locations. MAJCOMs are responsible for contracting control tower services at active duty locations. Operational oversight ensures the contractor meets USAF operational requirements and includes staff assistance visits and evaluations according to AFI 13-218.

Chapter 14

COMBAT READINESS

14.1. Planning for Combat Operations.

14.1.1. MAJCOM OPRs for ATC will:

14.1.1.1. Ensure sufficient controllers are available to meet combat/wartime requirements. This includes developing Unit Type Code (UTC) packages for Operations Plans Timed Phased Force Deployment Data (TPFDD) used to provide forces in support of combat operations.

14.1.1.2. Ensure Designed Operational Capability (DOC) statements are prepared for units with ATC deployment taskings.

14.1.1.3. Ensure controllers are trained to provide support required by combatant commanders and meet mobility requirements. Controllers must be trained and prepared to operate in-place or deployed.

14.1.1.4. Ensure tactical air traffic facilities have interoperable communications with appropriate elements of the TACS, airbase defense units, and aircraft systems of joint/combined elements using the facilities.

14.1.1.5. Ensure survivability is considered in development of terminal facilities and systems.

14.1.1.6. Ensure coordination with MAJCOM plans divisions and AFFSA/XA in conjunction with any wartime action.

14.1.1.7. Base Level Assessment Report. (RCS: HAF-XO[A]9716) Forward Base Level Assessment (BLA)/in-place wartime requirements for each facility (including Base Operations) to HQ AFFSA/XA annually NLT 15 April each odd year (unless otherwise directed). NOTE: (Added) USAFE and PACAF need only forward BLA on locations with UTC taskings.

14.1.2. Airfield Operations Flight Commander shall:

14.1.2.1. Review base and host nation war plans at least annually. They must also be familiar with applicable portions of the Base Use Plan (Parts 1 and 2) and Survival Recovery and Reconstitution Plan. (These plans and wing wartime missions will be used to determine sourcing inputs for the BLA and training requirements).

14.1.2.2. Annually determine the in-place wartime mission for each facility (including Base Operations) and the number of personnel needed to operate those facilities. See guidance in Attachment 14.

14.1.3. USAF airfield operations minimum standard for each UTC position tasked is to have one primary and one alternate qualified (1:2 ratio).

14.1.4. Review AFM 13-220 for specific mobility and deployment requirements.

14.2. Preparation For Combat Operations.

14.2.1. Controllers directly tasked to support joint/combined combat air traffic/airspace operations and/or the TACS should receive priority for the Joint Air Operations Staff Course and Air Ground

Operations School (AGOS). Course quotas can be obtained through each MAJCOM training division.

14.2.2. AOF/CC and other Air Force Air Traffic Service Staff Representatives must:

14.2.2.1. Ensure the combat capability of the air traffic system and controllers (mobility training, mobility equipment, shot records, etc.) are included and evaluated during local and command exercises. (See paragraph 14.3.).

14.2.2.2. Maintain liaison with exercise planners and assist in developing realistic objectives and scenarios that provide controllers the opportunity to train and assess combat readiness. Training shall be according to the supported command's threat environment and include performance while operating in full NBC ensemble.

14.2.2.3. Where appropriate, work with the wing airspace manager to schedule temporary use of airspace to evaluate realistic combat launch and recovery methods, air defense assistance, EMCON procedures, minimum communications procedures, etc.

14.2.2.4. Any unit with a UTC tasking must ensure each tasked controller has full mobility equipment including a gas mask.

14.3. Mobility Requirements. The following requirements must be available, completed, and/or verified:

14.3.1. Current Leave and Earnings Statement (LES).

14.3.2. Ear plugs.

14.3.3. Spectacles for chemical warfare (CW) Mask.

14.3.4. Medical qualifications according to AFI 48-123 (AF Form 1042, **Medical Recommendations for Flying or Special Operation Duty**).

14.3.5. AF Form 623.

14.3.6. FAA Form 7220-1, ATCS Certificate.

14.3.7. AC Form 8060-1, CTO Certificate (when applicable).

14.3.8. Medical Record equilivants as prescribed by the Flight Surgeons Office.

14.3.9. Training:

14.3.9.1. Cardiopulmonary Resuscitation (CPR) Training.

14.3.9.2. Small Arms Qualification (M-16) (AF Form 522, Ground Weapons Training Data and USAF Firearms Qualification).

14.3.9.3. CW Training (gas mask).

14.3.9.4. Electronic Warfare Training.

14.3.9.5. Generator Training (if available).

14.3.9.6. OPSEC Training.

14.3.9.7. Self-Aid/Buddy Care.

14.3.10. Government drivers record/license.

14.4. Applicable Publications. The following sources provide more detailed guidance and policy:

14.4.1. JTPub 3-52, Joint Airspace Control in a Combat Zone (U).

14.4.2. AFM 2-12, Airspace Control in the Combat Zone (U).

14.4.3. AFI 10-212, Air Base Operability (U).

14.4.4. AFI 10-403, Deployment Planning (U).

14.4.5. AFMAN 10-401, Operations Plan and Concept Plan Development and Implementation. (U).

14.4.6. ACCI 13-AOC, Vol III, AOC Operations (U)

14.4.7. ACC/USAFE/PACAFP 50-38, Integrated Combat Airspace Command and Control (U).

14.4.8. USAF War Mobilization Plan (WMP), All Volumes (S).

14.4.9. AFMAN 13-220, Deployment of Airfield Operations.

14.4.10. Host nation documents as required.

14.4.11. Applicable numbered operations or concept plans.

Chapter 15

NATIONAL AIRSPACE SYSTEM (NAS)

15.1. NAS Defined. The common network of U.S. airspace, air navigation facilities, equipment and services, airports or landing areas, aeronautical charts, information and services, rules, regulations and procedures, technical information, and manpower and materiel. Included are system components shared jointly with the military.

15.1.1. The OSS/CC will identify NAS ATCALS components in an LOP. When an ATCALS component is part of the NAS, coordinate with the proper ARTCC, FAA TRACON, and Flight Service Station (FSS) for anything that affects service. Request NOTAM action through the appropriate agency.

15.2. Management of USAF ATCALS . AFFSA/XR is the standard system manager for US Air Force ATCALS and is responsible for planning, implementing, and administering a program to control the inclusion and removal of Air Force ATCALS from the NAS.

15.2.1. The program must address system development, architecture, integration, and certification standards for all new ATCALS.

15.2.2. Coordinate with the appropriate FAA authority on all Air Force ATCALS proposed for inclusion in the NAS.

15.2.3. The FAA considers certification of NAS ATCALS an inherently governmental function which must be performed by government personnel. The Air Force Commercial Activities Program Manager (AF/PER) has determined that all USAF ATCALS maintenance certification is also inherently governmental.

15.2.4. All ATCALS must meet specifications and criteria according to FAAOAP 8200.1 (AFMAN 11-225). Entering or removing USAF ATCALS from the NAS does not negate flight inspection or maintenance certification procedures required by federal regulations or other Air Force directives.

15.3. ATCALS Available for Inclusion in the NAS .

15.3.1. Radar Approach Control (RAPCON). Air Force facilities which provide terminal, overflight, or enroute air traffic control service to civil aircraft. Designation in NAS must include associated VHF radio equipment available for civil use.

15.3.2. Airport Surveillance Radars (ASR). Air Force terminal radar sensors available to provide radar data on terminal, overflight, or enroute aircraft movements to civilian agencies.

15.3.3. Control Towers. Air Force facilities providing service at joint-use airfields. Limit NAS certification to VHF radio equipment supporting civil operations.

15.3.4. VOR, VORTAC, and LF NDB. Air Force-owned ATCALS which civil aircraft use for instrument approach procedures to joint-use civil airfields or which support the national airways structure.

15.3.5. PAR, ILS, and MLS. Precision instrument landing systems used to support civil operations into a joint-use facility.

15.4. Procedures for Entering ATCALS Into the NAS . AOF/CC must refer requests to their appropriate MAJCOM. The letter of transmittal must contain an evaluation of the request and, when recommending approval, a statement that the facility meets Air Force T.O. specifications and flight inspection standards. The unit must also identify the existing facility restoral policy.

15.4.1. The MAJCOM OPR for ATC must review the request for validity:

15.4.1.1. If they do not consider the request valid, inform the requesting agency and send a copy to AFFSA/XR.

15.4.1.2. If they validate the request, they send it to the appropriate FAA region Air Force Representative (AFREP) to determine if existing maintenance restoral policy satisfies the FAA requirement.

15.4.2. If the request requires additional services or equipment, advise the FAA region of the associated cost and negotiate a reimbursement agreement. Do not provide an increased posture until arranging a reimbursement method.

15.4.3. When the above actions are complete, notify the appropriate FAA region AFREP, AFFSA/XR, and the concerned air traffic control unit of the effective date to enter the NAVAID into the NAS.

15.5. Withdrawing ATCALS From the NAS . Process requests to remove Air Force ATCALS from the NAS as follows:

15.5.1. Send requests received at the base level to MAJCOM.

15.5.2. The owning MAJCOM must coordinate the effective date for removal of the facility from the NAS with the appropriate FAA region, through the AFREP.

15.5.3. MAJCOM must inform AFFSA/XR and the local air traffic control unit of the effective date.

Chapter 16

AIR TRAFFIC CONTROL AND LANDING SYSTEMS (ATCALS) REVIEW BOARD

16.1. ATCALS Review Board. The board, chaired by MAJCOM ATC, provides MAJCOM Division Chiefs a forum to collectively review the status of MAJCOM ATCALS programs and jointly resolve issues. Quarterly meetings will be held; however, a desk-top study, as determined by the chairperson, may be held in lieu of a formal meeting. Meeting minutes will be sent to HQ AFFSA/XR, all MAJCOM ATC units who will provide a copy to their Communications maintenance and base programming offices, and other agencies as requested. MAJCOMs will determine if local unit meetings are required.

16.1. (AFMC) The base will appoint a point of contact (POC) for the Air Traffic Control and Landing Systems (ATCALS) Review Committee. The POC will provide HQ AFMC/DOAT the most current information and status of all ATCALS programs and issues that are in direct support of the ATC mission; e.g., Tower, RAPCON, and RCF. The following information is required:

- *Facilities commissioned or decommissioned.
- *Status of active and proposed communications-computer programs.
- *Allied support status of any programs/projects.
- *Special problems, facilities or areas.
- *Funding issues.
- *Status of new or proposed ATC military construction program projects.
- *Any other ATCALS programming issues/concerns.

16.2. Procedures Explained.

16.2.1. Agenda. Show open, closed items, and estimated completion dates where applicable. Recommended areas to address:

- Facilities commissioned or decommissioned.
- Repair schedules (for example, depot, on-site Mobile Depot Maintenance (MDM).
- Active and proposed communications-computer projects.
- Modification programs and schedules.
- Allied support status for ATCALS installations.
- Special problem facilities or areas.
- Funding issues.
- National Airspace System Plan and associated ATCALS issues.
- Status of implementation programs.

16.2.2. ATCALS Review Board. A board which will convene quarterly, to discuss and make recommendations concerning various ATCALS programs, projects, and issues. The meeting should include discussing new agenda items and reviewing previous items, as required by the chairperson.

16.2.3. ATCALS Review Board Minutes. Signed by chairperson and approved by the Director Air Traffic Services, or designated alternate authority. Accomplish ATCALS Review Board minutes by

letter. MAJCOMs will send one copy of combined unit review board minutes to AFFSA/XR, 38 EIS/XP, FAA/AAT-5 (liaison officer), FAA/AVN-550, NGB/SC. MAJCOMs determine additional distribution.

16.2.4. Membership. MAJCOMs determine ATCALS Review Board membership. The following are recommendations:

- Air Traffic Services (Chairperson).
- ATCALS system managers.
- Civil engineering.
- Plans and programs.
- Logistics.
- Current operations.
- Airfield Management.
- Other representatives as deemed necessary.

ATCALS Review Board membership will consist of division chiefs or their designated representatives from:

- ATC Operations and Procedures.
- ATC ATCALS Resources.
- Command and Control Requirements Division.
- ATCALS Surveillance Systems Division.
- Civil Engineering Program Division.
- DO Financial Management Division.
- Programs Division.
- Other MAJCOM Divisions as required.

JOHN P. JUMPER, Lt Gen, USAF
DCS/Air and Space Operations

Attachment 1

GLOSSARY OF REFERENCES AND OTHER SUPPORTING INFORMATION

References

AFPD 13-2, *Air Traffic Control, Airspace, and Range Management*

AFH 11-203, *Weather for Aircrews*

AFH 36-2235, *Vol II, ISD Application to Unit Training*

AFI 10-403, *Deployment Planning (Mobility)*

AFI 10-707, *Spectrum Interference Resolution*

AFI 11-201, *Flight Information*

AFI 11-204, *Operational Procedures for Aircraft Carrying Hazardous Materials*

AFI 11-202, *Vol III, General Flight Rules*

AFI 11-208, *The US Military Notice to Airmen (NOTAM) System*

AFI 11-209, *Air Force Participation in Aerial Events*

AFI 11-218, *Aircraft Operation and Movement on the Ground*

AFI 13-201, *US Air Force Airspace Management*

AFI 13-203, *Air Traffic Control*

AFI 13-207, *Preventing and Resisting Aircraft Piracy (FOUO)*

AFI 13-213, *Airfield Management*

DELETE AFMAN 13-214, *Aircraft Surge Launch and Recovery (ASLAR) Procedures*

AFI 13-216, *Evaluation of Air Traffic Control and Landing Systems (ATCALS)*

AFI 13-218, *Air Traffic System Evaluation Program*

AFI 14-205, *Requirements for Cartographic/Geodetic Products and Services*

AFI 32-1026, *Planning and Design of Airfields*

AFI 32-1043, *Management of Aircraft Arresting Systems*

AFI 32-1063, *Electric Power Systems*

AFI 33-211, *Communications Security (COMSEC) User Requirements*

AFI 33-212, *Reporting COMSEC Incidents*

AFI 36-2807, *HQ USAF Deputy Chief of Staff Plans and Operations Annual Awards Program*

AFI 36-2201, *Developing, Managing, and Conducting Military Training Program*

AFI 36-2210, *Air Traffic Control Officer Training Program*

AFI 36-2222, *Air Traffic Control Training Publications*

AFI 36-2243, *Cockpit/Crew Resource Management (CRM) Program*

AFI 36-2605, *Air Force Military Personnel Testing Program*

AFI 36-2206, *Reenlistment in the United States Air Force*

AFI 37-131, *Freedom of Information Act Program*

DELETE AFI 37-132, Freedom of Information Act Program

AFI 48-123, *Medical Examination and Medical Standards*

AFI 51-701, *Negotiating, Concluding and Reporting International Agreements*

AFI 91-202, *The US Air Force Mishap Prevention Program*

AFI 91-204, *Investigating and Reporting Mishaps*

AFR 127-11, (to be replaced by AFJI 91-206, *Participation in a Military or Civil Aircraft Accident Safety Investigation*)

AFJMAN 11-226, FAA Handbook 8260.3, *US Standard for Terminal Instrument Procedures (TERPS)*

AFMAN 11-225, FAA Handbook OAP 8200.1, *US Standard Flight Inspection Manual Procedures*

AFMAN 13-209, *Instrument Procedures*

AFMAN 13-215, *ATC Radar Maps and Associated Systems*

AFMAN 13-220, *Deployment of Airfield Operations*

AFMAN 15-111, *Surface Weather Observations*

AFMAN 36-2108, *Airman Classification*

AFMAN 36-2234, *Instructional System Development*

AFMAN 37-138, *Records Disposition--Procedures and Responsibilities*

AFPAM 91-211, *US Air Force Guide to Mishap Investigation*

AFMP 91-212, *Bash Management Techniques*

DELETE JANAP 146E, Canadian-United States Communications Instructions for Reporting Vital Intelligence Sightings

(CIRVIS/MERINT)

Air Traffic Control Training Series:

(*See Air Force Index 25 for current listing of ATC training series)*

Federal Aviation Regulations:

Pt 01, *Definitions and Abbreviations*

Pt 65, *Certification: Airman Other Than Flight Crew Members*

Pt 71, *Designation of Federal Airways, Controlled Airspace, and Reporting Points*

Pt 73, *Special-Use Airspace*

Pt 77, *Objects Affecting Navigable Airspace*

Pt 91, *General Operating and Flight Rules*

Pt 93, *Special Air Traffic Rules and Airport Traffic Patterns*

Pt 95, *IFR Altitudes*

Pt 97, *Standard Instrument Approach Procedures*

Pt 105, *Parachute Jumping*

Pt 157, *Notice of Construction Alteration, Activation, and Deactivation of Airports*

Pt 171, *Non-Federal Navigation Facilities*

FAA Handbooks and Orders:

7100.8, *Standard Instrument Departure (SID)*

7100.9, *Standard Terminal Arrival (STAR)*

7110.52, *Suspected Illegal Use of Aircraft*

7110.65, *Air Traffic Control*

7110.67, *Special Aircraft Operations by Law Enforcement Organizations*

7110.88, *Optimum Descent Procedures*

7130.3, *Holding Pattern Criteria*

7210.3, *Facility Operation and Administration*

7220.1, *Air Traffic Control Certification Procedures*

7340.1, *Contractions*

7350.6, *Location Identifiers*

7400.2, *Procedures for Handling Airspace Matters*

7610.4, *Special Military Operations*

8240.36, *Instructions for Flight Inspection Reporting*

8240.41, *Flight Inspection/Air Traffic Coordination*

8260.19, *Flight Procedures and Airspace*

Airman Information Manual (AIM)

International Civil Aviation Organization (ICAO) Publications

North Atlantic Treaty Organization Standardization Agreements (NATO STANAGs)

DoD Flight Information Publications:

DoD Flight Information Handbook

High and Low Altitude Instrument Approach Procedures

High and Low Altitude Charts

VFR and IFR Supplements

Planning Data and Procedures

Abbreviations and Acronyms

NOTE:
FAA Acronyms--Air Force abbreviations and acronyms will be utilized at all Air Force, AFRC, and ANG locations when staffed with DoD or contract civilian controllers.

ACATCT—Assistant Chief, Air Traffic Control Training

ACC—Airspace Control Center

ACCTLR—Assistant Chief Controller

ACO—Airspace Control Order

ACP—Airspace Control Plan

ACSE—Assistant Chief, Standardization and Evaluation

ADIZ—Air Defense Identification Zone

AF Personnel—Airway Facilities ATCALS maintenance

AFJQS—Air Force Job Qualification Standard

AFREP—Air Force Representative

AFSC 1C1X1—(Air Traffic Controller) GS-2152

AGOS—Air Ground Operations School

ATD—Air Traffic Division (MAJCOM OPR for ATC)

ATM—Air Traffic Manager CCTLR, when requirement or function is limited to the internal operation of a facility, otherwise AOF/CC.

AM—Area Manager Watch Supervisor (WS)

ANG—Air National Guard

ANGRC—Air National Guard Readiness Center

AOC—Air Operations Center

AOF/CC—Airfield Operations Flight Commander

AOF/DO—Airfield Operations Flight Operations Officer

AOF/SO—Airfield Operations Systems Officer

AOR—Area of Responsibility

AOSE—Airfield Operations Standardization Evaluation

APU—Auxiliary Power Unit

ARTCC—Air Route Traffic Control Center

(DELETE) ASLAR—Aircraft Surge Launch and Recovery

ASR—Airport Surveillance Radar

ATARS—Air Traffic Activity Reporting System

ATC—Air Traffic Control

ATCALS—Air Traffic Control and Landing System

ATCS—Air Traffic Control Specialist

ATCTD—Air Traffic Control Training Device

ATIS—Automatic Terminal Information Service

ATREP—Air Traffic Representative

ATSA—Air Traffic System Analysis

ATSEP—Air Traffic System Evaluation Program

AUS—Air Traffic Automation Control Specialist

AWDS—Automated Weather Distribution System

BLA—Base Level Assessment

BRITE—Bright Radar Indicator Tower Equipment

CAT—Category

CATCA—Chief, Air Traffic Control Automation

CATCOT—Chief, Air Traffic Control Officer Training

CATCT—Chief, Air Traffic Control Training

CBT—Computer-Based Training

CCT—Combat Control Team

CCTLR—Chief Controller

CCTV—Closed Circuit Television

CDP—Controller Development Program

CDR—Continuous Data Recording

CFETP—Career Field Education and Training Plan

CPI—Crash Position Indicator

CSE—Chief, Standardization and Evaluation

CSIL—Customer Service Information Line

CTO—Control Tower Operator

CWW—Cooperative Weather Watch

DA—Drug Abuse

DASR—Digital Airport Surveillance Radar

(Added) DAT—Digital Audio Tape

DBRITE—Digital Bright Radar Indicator Tower Equipment

DH—Decision Height

DNIC—Duty Not Involving Controlling

DOC—Design Operational Capability

DV—Distinguished Visitor

DVA—Diverse Vector Area

DVRS—Digital Voice Recorder System

EARTS—En route Automated Radar Tracking System

EDIT—Experiencing Difficulty in Training

ELT—Emergency Locator Transmitter

EMI—Electromagnetic Interference

ETG—Enhanced Target Generator

ETVS—Enhanced Terminal Voice Switch

FAA—Federal Aviation Administration

FAA Term—Air Force Equivalent

FDEP—Flight Data Entry and Printout

FDS—Flight Data System

FEQ—Field Evaluation Questionnaire

FFM—Far Field Monitor

FLIP—Flight Information Publication

FOC—Fear of Controlling

FOIA—Freedom of Information Act

FOUO—For Official Use Only

FSDO—Flight Standards District Office

FSS—Flight Service Station

FTOR—Failure To Obtain (or Maintain) a Rating

FPL—Full Performance Level (Facility Rated Controller)

GADO—General Aviation District Office

GCA—Ground Controlled Approach

GCG—General Certification Guide

HAT—Height Above Touchdown

HATR—Hazardous Air Traffic Report

HIRL—High Intensity Runway Lights

ICAO—International Civil Aviation Organization

IFF—Identification Friend or Foe

IFR—Instrument Flight Rules

ILS—Instrument Landing System

ISD—Instructional System Development

LAAS—Low Altitude Alert System

LMR—Land Mobile Radio

LOA—Letter of Agreement

LOP—Local Operating Procedure

MAJCOM—Major Command

MDA—Minimum Descent Altitude

MDS—Mission Design Series

METNAV—Meteorological and Navigational Aids

MFD—Military Facility Deviation

MIA—Minimum IFR Altitude

MIFRAC—Minimum IFR Altitude Charts

MLS—Microwave Landing System

MM—Middle Marker

MOA—Military Operations Area

MOA—Memorandum of Agreement

MOU—Memorandum of Understanding

MSAW—Minimum Safe Altitude Warning

MTTR—Master Technical and Task Reference

MVA—Minimum Vectoring Altitude

NAS—National Airspace System

NATCF—Nellis Air Traffic Control Facility

NAVAID—Navigational Aid

NDB—Non-directional Beacon

NOTAM—Notice to Airmen

NTSB—National Transportation Safety Board

OCR—Office of Collateral Responsibility

OG/CC—Operations Group Commander

OJT—On-the-Job Training

OM—Outer Marker

OPlan—Operation Plan

OPR—Office of Primary Responsibility

PAPIs—Precision Approach Path Indicators

PAR—Precision Approach Radar

PCAS—Primary Crash Alarm System

PCG—Position Certification Guide

PIDP—Programmable Indicator Data Processor

PIREP—Pilot Report

PM—Preventive Maintenance

PWS—Performance Work Statement

RABM—Range Azimuth Beacon Monitor

RAPCON—Radar Approach Control (USAF)

RFC—Radar Final Control

RMU—Runway Monitoring Unit

ROM—Read Only Memory

RPI—Runway Point of Intercept

RSI—Remote Status Indicator

RSU—Runway Supervisory Unit

RVR—Runway Visual Range

SC—Senior Controller

SC—Senior Controller (Controller in charge)

SEI—Special Experience Identifier

SID—Standard Instrument Departure

SIF—Selective Identification Feature

SOF—Supervisor of Flying

SSILS—Solid State Instrument Landing System

STANAG—Standardization Agreement

STAR—Standard Arrival Route

STARS—Standard Terminal Automation Replacement System

STS—Specialty Training Standard

TA—Table of Allowance

TACS—Theater Air Control System

TCG—Task Certification Guide

TDSA—Air Traffic Control Training Device System Administrator

TERPS—Terminal Instrument Procedures

TO—Technical Order

TR—Technical Reference

TRACON—Terminal Radar Approach Control (FAA)

TRB—Training Review Board

TSN—Chief, ATC Training and Standardization

UGT—Upgrade Training

UHF—Ultra-High Frequency

UPS—Uninterruptible Power Supply

UPT—Undergraduate Pilot Training

UTA—Unit Training Assembly

UCT—Universal Coordinated Time

UTC—Unit Type Code

VASI—Visual Approach Slope Indicator

VFR—Visual Flight Rules

VHF—Very High Frequency

VMG—Video Map Generator

WS—Watch Supervisor

Terms

Aircraft Surge Launch and Recovery—Air crew and air traffic control procedures designed to expedite the launch and recovery of military aircraft.

Air Traffic Control and Landing Systems—Department of Defense facilities, personnel, and equipment (fixed, mobile, and seaborne) with associated avionics to provide safe, orderly, and expeditious aerospace vehicle movements worldwide.

Air Traffic Control Tower Operator—An individual who meets the requirements for and is issued an air traffic control specialist certificate. An air traffic control tower operator may perform duty in either a control tower or a radar facility.

Approach End of Runway—That end of a runway nearest to the direction from which the final approach is made.

Appropriate Examiner—The CTO examiner or Chief, Standardization and Evaluation.

Area of Responsibility—1. The geographical area associated with a combatant command within which a combatant commander has authority to plan and conduct operations. 2. In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire on known targets or targets of opportunity and by observation. (Joint Pub 1-02)

Cancellation of Position Certifications and Facility Ratings—The termination of a qualified controller's current position certifications and facility ratings.

Computer-Based Training—Students receive lesson materials at a training terminal through student and computer interaction.

Computer-Managed Instruction—The use of a computer to manage a student's progress through a training course (lesson assignments, record keeping, documentation, etc.).

Contractor—Any civilian company, limited business venture, sole proprietor, the FAA or Department of Defense when contracted to perform ATC operations for the US Air Force.

Currency—The holder of an air traffic control certificate may not perform any duties under that certificate unless:

- They have served for at least three of the preceding 6 months as an air traffic controller at the ATC facility to which their facility rating applies, or at the operating positions for which they are qualified.
- They have shown that they meet the requirements for their certificate and facility rating at the facility concerned, or for operating positions for which they have previously qualified. (Reference: Federal Aviation Regulation Part 65. For USAF currency purposes control tower operator (CTO) includes the air traffic control specialist (ATCS) certificate)

Departure End of Runway—That end of a runway nearest to the direction in which initial departure is made.

Dual Certification—A controller is dual certified when they hold current position certifications in more than one facility. The controller must maintain proficiency standards in both facilities to retain dual certification status.

Dual Qualified—A controller is dual qualified when they have been awarded both a radar and a control tower SEI.

En Route Automated Radar Tracking System (EARTS)—A modular, computer-based air traffic system.

Evaluation—A judgment expressed as a measure or ranking of trainee achievement, instructor (trainer) performance, process, application, training material, and other factors (see AFMAN 36-2234).

Facility Rating—An endorsement by the Control Tower Operator examiner, Chief, Standardization and Evaluation, or Assistant Chief, Standardization and Evaluation that an individual has demonstrated the competence, qualifications, and skills required to control traffic at positions included in the type of facility rating issued. Types of facility ratings are:

- ***Non-radar Approach Control (APC)***--Includes non-radar approach control, departure control, and associated assistant positions.
- ***Air Route Traffic Control Center (ARTCC)***—No USAF facilities satisfy requirements for ARTCC ratings.
- Control Tower Operator (CTO)--Includes local control, ground control and flight data positions.
- Ground Controlled Approach (GCA)--Includes all positions except coordinator.
- Radar Approach Control (RAPCON)--Includes approach, departure, arrival and associated assistant positions.
- Radar Final Control (RFC)--Includes positions that conduct PAR approaches or ASR approaches and positions where controllers use PAR equipment to monitor aircraft conducting ILS or MLS approaches.

Ground Controlled Approach—A fixed, mobile, or transportable facility that provides radar ATC services within airspace designated by an approach control facility.

Instrument Flight Rules (IFR) Tower Operation—IFR service provided from the tower using either Digital Bright Radar Indicator Tower Equipment (DBRITE) or nonradar approach control procedures.

Joint Facility—An air traffic control facility that divides responsibilities between the US Air Force and another military or civil agency.

Knowledge—Use of the mental process which enables a person to recall facts, identify concepts, apply rules or principles, solve problems, and think creatively. Knowledge is not always directly observable. A person manifests knowledge through performing associated overt activities. Also see SKILL.

Local Operating Procedures (LOP)—Supplemental procedures issued as letters of agreement, operations letters, operating instructions, memorandum of understanding, memorandum of agreement, squadron regulations, operations plans, or base manual or instructions.

Master Technical and Task Reference (MTTR)—Divided into two sections: Section 1 - Contains a current listing of all mission essential ATC documents (i.e., AF, MAJCOM, local). The list shall indicate document number, title, and date. Section 2 - Identifies all facility/workcenter tasks and the corresponding technical references (TRs) that support qualification, upgrade, and specialized training. TRs must be identified and broken down to the lowest denominator by position/duty (i.e., local control PCG, CCTLR TCG, AUS equipment TCG) for each task. (see Attachment 13, Sample MTTR).

Monitor—Directly supervise and provide necessary on-the-spot assistance to ensure position operation in a safe, orderly, and expeditious manner. Anyone who monitors a trainee in position must hold AFSC 1C151 or above, be trainer qualified, and be facility rated or position certified for the position they monitor.

Multiple Approach—When more than one aircraft is on the radar final approach at the same time. Normal radar separation standards apply, and a controller controls only one aircraft, but may monitor two aircraft simultaneously.

Objective—A statement that specifies what behavior is to be exhibited, the conditions under which behavior will be accomplished, and the minimum standard of performance. Objectives describe only the behaviors that directly lead to or specifically satisfy a job performance requirement. An objective is a statement of instructional intent (see AFMAN 36-2234).

Official Altimeter Setting—The altimeter setting issued by the weather station that serves the base. If the base has no weather station, the altimeter in a control tower may serve as the official altimeter setting.

On-Call Time—A controller on-call must remain in the local area and be able to be contacted in the event it becomes necessary to open an ATC facility outside of normal operating hours. A controller on-call must not consume alcohol or take medications that effect duty status.

Position Certification—An endorsement by the Chief, Standardization and Evaluation, Chief, Training and Standardization, Assistant Chief, Standardization and Evaluation, or Control Tower Operator examiner that the applicant has demonstrated the competence, qualifications, and skill required to operate at a specific position.

Precision Approach Radar—Radar displaying range, azimuth, and elevation (in relation to a glide slope) normally encompassing an area from 10 to 20 miles on final approach to a position on the runway intercepted by the glide slope. (AFM 11-1)

Proficiency—The performance of air traffic control duties at or above the standards prescribed in the position certification guides.

Qualification Training—Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel on-the-job training program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job. (AFM 11-1)

Qualified Controller—An individual who is position certified or facility rated and holds AFSC 1C151 or above, or has held AFSC 1C131 for at least 6 months, successfully completed CDCs, and holds current ratings or certifications as follows:

- ***Control Tower.*** CTO Rating.
- Radar Facilities:
- ***GCA or RFC.*** GCA or RFC rating.
- ***RAPCON.*** Certifications in approach control, assistant approach control, and arrival control.

(An officer controller (AFSC 13MX) must meet the minimum certification requirements as stated in chapter 1).

Radar and Tower Coordination System—A radar and tower coordination system (lights serve as a reminder to the tower controller that an arriving radar controlled aircraft is in a defined location, or at a prescribed position). This system may supplement or simplify the voice coordination between facilities. It does not replace voice coordination.

Radar Approach Control (RAPCON)—A fixed, mobile, or transportable radar facility that provides approach control service using surveillance radar.

(Added) Radar Final Control—An air traffic control service that provides navigational guidance or approach monitoring during the final approach phase of flight. This service normally includes precision approach radar (PAR) approaches, instrument approach monitoring using PAR equipment when final approach courses are coincident, flight following, airport surveillance radar (ASR) approaches and safety alert services. Additional services are provided within system capability. A controller assigned to the radar final control position (called the radar final controller) normally provides this service.

Radar Final Control (RFC) Facility—A fixed, mobile, or transportable radar facility which provides

RFC service. (PAR rating required for SEI)

Recurring Training—Training provided to periodically review selected current operational procedures and techniques.

Review Training—Training conducted for the purpose of correcting specific operational deficiencies detected through performance evaluations, supervisory observations, trends, operational evaluations, etc.

Runway Supervisory Unit (RSU) or Runway Monitoring Unit (RMU)—A portable or fixed shelter where non-ATC personnel observe arriving and departing aircraft. The unit is near the active runway, and has two-way air-ground communications.

Runway intrusion—.-- Any unauthorized entry into the radio controlled movement area, regardless of impact on aircraft safety.

Skill—The ability to perform a job-related activity that contributes to the effective performance of a task. Skills involve physical or manipulative activities which often require knowledge for their execution. All skills are actions having specific requirements for speed, accuracy, or coordination.

Special Evaluation—An evaluation other than an initial evaluation and used to evaluate a qualified or suspended controller's performance.

Standby Time—Time during published flying hours when a facility is on standby and the controllers are immediately available to return the facility to operation within the time limit the OG/CC specifies.

Supervisor of Flying (SOF)—A rated officer authorized by the flying unit commander to monitor and supervise current flight operations. A SOF may perform duties from the control tower.

Suspension of Air Traffic Control Specialist Certificate—Administrative action by the commander to temporarily remove an individual from air traffic control duties.

Suspension of Position Certification or Facility Rating—Action by the chief controller, Chief, Air Traffic Control Officer, or appropriate examiner to restrict a qualified controller pending additional training, evaluation, or cancellation of a position certification or facility rating.

Task—A unit of work activity or operation which forms a significant part of a duty. A task usually has clear beginning and ending points and directly observable or otherwise measurable processes, frequently but not always resulting in a product that can be evaluated for quantity, quality, accuracy, or fitness in the work environment. A task is performed for its own sake; that is, it is not dependent upon other tasks, although it may fall in a sequence with other tasks in a duty or job array.

Task Certifier—An individual who holds AFSC 1C171 or above, is position certified or facility rated, completes a formal OJT task certifier course, and is appointed in writing by the commander. (AOF/CC or CCTLR may appoint task certifiers if this responsibility has been delegated by the commander). ***Exception*:** Task certifiers for AFJQS-001 must be at least a 1C151 SSgt.

Terminal Objective—An objective the learners are expected to accomplish upon completion of the instruction. It is made up of enabling (support or subordinate) objectives. (See AFMAN 36-2234)

Trainer—An individual who holds AFSC 1C151 or above, is position certified or facility rated, completes AT-M-01 (trainers guide), is recommended by the supervisor, completes a formal OJT trainer course, completes AFJQS-001 trainer’s section, and is appointed in writing by the commander. (AOF/CC or CCTLR may appoint trainers if this responsibility has been delegated by the commander).

Training Requirements—The skills and knowledge that are required for satisfying the job performance

requirements, and not already in the student's incoming repertoire. (AFM 11-1)

Training System—A systematically developed curriculum including, but not necessarily limited to, courseware, classroom aids, training simulators and devices, operational equipment, embedded training capability, and personnel to operate, maintain, or employ a system. The training system includes all necessary elements of logistic support.

Underrun or Overrun—Usually a nonstressed extension at each end of the runway. Do not use the extension as a landing area, except in instances where an aircraft emergency warrants its use. The extension is part of the aircraft movement area, but do not use the extension for spacing between aircraft.

Attachment 2

SUBJECT INDEX

(Paragraph numbers are shown in parentheses.)

A

B

Withdrawing ATCALS from the NAS (15.5)

Attachment 3

SAMPLE LETTER, SUSPENSION OF ATCS CERTIFICATE

MEMORANDUM FOR (Controller Concerned)(date)

from: (unit Commander)

SUBJECT: ATCS Certificate Suspension Pending Withdrawal

1.Under the provisions of AFI 13-203, I suspend your ATCS certificate and restrict you from performing air traffic control duties. This suspension will remain in effect pending the results of the evaluation and investigation of your case. (Statement of substance of cause for suspension.)

2.After receipt of the evaluation and investigation results, I may take action to withdraw your AFSC without further notice. If I or the review authority determines your withdrawal is for reasons within your control (for cause) it could result in an administrative discharge.

NOTE: If the controller is receiving an SRB add the following statement, "If I or the review authority determines withdrawal was for cause then I will initiate action to terminate and recoup your SRB.

3.You may consult with legal counsel and submit any written statement or documentary evidence to consider in evaluating this matter.

4. Acknowledge receipt of this communication by endorsement below within 3 workdays. Submit any statements or documents for consideration within 10 workdays.

(Signature of Unit Commander)

1st Ind, (Controller)

TO: (Unit Commander)

1.Receipt of ATCS certificate suspension and pending withdrawal acknowledged.

2.I have been afforded the opportunity of consulting with legal counsel regarding this action. I was counseled by (name), (grade and title, if military), (address, if civilian)/I declined legal counsel.

3.I do/do not desire to attach a statement in my own behalf.

4.I agree/disagree with the proposed action.

(Signature of Controller Concerned)

(Name, Grade,) USAF

NOTE: Controller will initial directly above the phrases lined out in their endorsement.

Attachment 4

AFSC WITHDRAWAL CHECKLIST FOR CONTROLLERS WHO

FAIL TO OBTAIN OR MAINTAIN POSITION CERTIFICATION OR FACILITY RATING (FTOR)

A.4.1. Name_____Grade_____Date assigned_____

A.4.2. INITIAL WITHDRAWAL PROCEDURES:

Stop training and document.

Commander issues ATCS certificate suspension, pending withdrawal letter (attachment 3).

Notify MAJCOM OPR for ATC of pending withdrawal action.

A.4.3. INVESTIGATION AND EVALUATION PROCEDURES:

A.4.3.1.After removal from training, get statements from:

AOF/CC. This statement may include inputs from the Deputy AOF/CC, CCTLR, CSE, and CATCT; but must include: (*NOTE: Individual statements may be written if deemed necessary)*

Date controller entered training.

Summary of actions taken to correct deficiencies.

Amount of training time lost.

Immediate Supervisor.

If a physical condition could have impaired the ability of the controller to perform in a satisfactory manner, refer them to the base flight surgeon for evaluation of medical qualification according to AFMAN 48-123.

The commander, with the aid of the base training manager, should evaluate the training given.

A.4.4. DETERMINATION PROCEDURES:

A.4.4.1.If the commander's evaluation did not substantiate the recommended AFSC withdrawal, then:

Return controller to duty.

Document return to training on AF Form 623a or suitable substitute.

Notify MAJCOM OPR for ATC of return to duty.

A.4.4.2.If the commander's evaluation substantiates AFSC withdrawal with no change in category, then:

For 1C131 personnel only, the immediate supervisor will initiate AF Form 2096, Classification/ On-The-Job Training Action and complete:

Section II:

Withdraw AFSC 1C151 and training status (TS) code "B". (Retrainees TS Code "F").

Enter AFSC 1C151 and TS code "T".

Section III. Trainee must check appropriate block on AF Form 2096, Classification/On-The-Job Training Action.

Enter the following statement in the remarks section of AF Form 2096 and have the trainee sign: "I have been briefed on my promotion status while being withdrawn from upgrade training. I further understand that removal from training based on failure to progress may result in separation."

A.4.4.3.For all AFSCs, commander's cover letter will include:

The course of action being recommended.

Response to allegations made by the controller being recommended for withdrawal.

Any inconsistent data or recommendations in the ATC staff's supporting statements.

Any disciplinary or administrative actions taken or pending against the controller that support the withdrawal.

A.4.4.3.1.One of the following statements:

Member did not receive an SRB.

Recommendation whether or not to recoup and terminate SRB (followed by commander's rationale).

A.4.4.4.If the commander's evaluation substantiates recommended withdrawal with a change in the category initially recommended, then:

Proceed to the new category checklist.

Suspend the controller's ATCS certificate under the new category. (attachment 10)

A.4.5.PROCESSING PROCEDURES:

Date all documents and stamp "For Official Use Only".

A.4.5.1.The withdrawal package must include:

Commander's cover letter.

Suspension letter (attachment 3).

Medical evaluations.

AOF/CC statement.

Immediate supervisor's statement.

Controller’s statement with any supporting documents (if appropriate).

Original or copy of AF Form 2096, Classification/On-The-Job Training Action (1C131 only).

Last three OERs or EPRs and any pertinent documents or statements deemed necessary.

AF Form 623 (with original documents).

Send original to servicing MPF classification and training section. Unit will file one copy of withdrawal package according to AFMAN 37-138.

A.4.6.UNIT ACTION AFTER MAJCOM REVIEW

A.4.6.1.AFSC withdrawal action taken:

CCTLR print “VOID” across face of ATCS certificate.

For 1C131 personnel initiate AF Form 2096 withdrawing AFSC and TS code “T” and enter into appropriate reporting identifier and TS code “T” (if member has a secondary AFSC, contact classification section of your MPF for necessary actions).

For 1C151 and 13MX or above, initiate AF Form 2096 withdrawing AFSC 1C1X1 or 13MX.

A.4.6.2.MAJCOM recommends return to duty.

Return controller to duty.

Document return to training on AF Form 623a or suitable substitute.

Initiate AF Form 2096 withdrawing TS code “T” and enter into appropriate TS code.

Attachment 5

ATCS CERTIFICATE WITHDRAWAL CHECKLIST

A.5.1. Name_Grade

A.5.2.SUSPENSION PROCEDURES:

Commander issues ATCS certificate suspension letter (attachment 3).

Notify MAJCOM OPR for ATC of ATCS certificate suspension.

A.5.3. INVESTIGATION/EVALUATION PROCEDURES:

A.5.3.1.The commander will:

Obtain statements from personnel concerned immediately after ATCS certificate suspension. Include any actions which make the controller a hazard to flying safety or incapable of performing as an air traffic controller.

Refer suspended controller to base flight surgeon to substantiate there are no medical problems which caused the actions for recommended withdrawal and verification that the controller meets the ATC medical requirements in AFI 48-143.

Evaluate the statements, medical evaluation(s), and whether or not controller's duty performance is a hazard to flying safety or incompatible with ATC.

A.5.4. DETERMINATION PROCEDURES:

A.5.4.1.If the commander's evaluation did not substantiate the recommended withdrawal, then:

Return controller to duty.

Notify MAJCOM OPR for ATC of reinstatement.

A.5.4.2.If the commander's evaluation substantiates recommended withdrawal with no change in the category stated in the suspension letter, prepare the commander's cover letter to include:

Allegations made by the suspended controller.

Why the controller is a hazard to flight safety or incompatible with ATC.

Recommendation for retention or revocation of authority to wear the ATC badge, or a statement that the authority to wear the badge was not given.

Inconsistent data or recommendations in the ATC staff's supporting statements.

A.5.4.2.1.One of these statements (1C1X1) (AFI 36-2606):

Member did not receive an SRB.

SRB recoupment and termination is not recommended (followed by rationale).

I recommend SRB recoupment and termination based on withdrawal of the controller's ATCS certificate for cause.

A.5.4.3. If the commander's evaluation does substantiate withdrawal with a change in the category stated in the suspension letter, then:

Issue the controller notification of the change with the Change of Recommended Withdrawal Category letter (attachment 10).

Follow the checklist for the new category.

A.5.5.PROCESSING PROCEDURES:

A.5.5.1.The withdrawal package must include:

Commander's cover letter.

Change of Recommended Withdrawal Category letter (if appropriate).

Suspension of ATCS certificate letter.

Medical evaluation(s).

Controller's statement with any attached supporting documents (if appropriate). Attachment 6 must be included if self-eliminating as a hazard to flight safety under unsubstantiated fear of controlling.

Other pertinent documents/statements deemed necessary.

Ensure all documents are dated and stamped "For Official Use Only."

Send original and one copy of withdrawal package to MAJCOM OPR for ATC. Unit will retain and file one copy according AFMAN 37-138.

A.5.6.UNIT ACTION AFTER MAJCOM REVIEW:

A.5.6.1.MAJCOM approves ATCS certificate withdrawal action:

CCTLR voids the ATCS certificate.

Initiate AF Form 2096 action to remove AFSC.

A.5.6.2.MAJCOM does not withdraw ATCS certificate:

Return controller to duty.

Annotate training records.

Attachment 6

SAMPLE LETTER, REQUEST FOR WITHDRAWAL FROM ATC DUTY

MEMORANDUM FOR (Unit Commander)

FROM:(Controller Concerned)

SUBJECT: Request for Withdrawal from Air Traffic Control Duty

1.According to AFI 13-203, I hereby voluntarily request permanent withdrawal from air traffic control duty. I understand if my Fear of Controlling (FOC) is not diagnosed as a medical disqualification by a military psychiatrist or psychologist and the (MAJCOM) Surgeon General, I may withdraw my statement and be returned to duty. If I persist with withdrawal from ATC duty, I am self-eliminating and my ATCS certificate will be withdrawn as a potential hazard to flight safety.

2. The following pertinent information is submitted:

a. Resume of air traffic control experience.

b. Reason for requesting withdrawal is: I profess a fear of controlling and consider myself a hazard to flying safety.

(Explanation of reason.)

(Signature of Controller Concerned)

(Name, Grade, USAF)

Attachment 7

ATCS CERTIFICATE WITHDRAWAL CHECKLIST FOR DRUG ABUSE (DA)

A.7.1.NameGrade

A.7.2.SUSPENSION PROCEDURES:

Commander issues ATCS certificate suspension letter (attachment 3).

Notify MAJCOM OPR for ATC of ATCS certificate suspension.

A.7.3. INVESTIGATION/EVALUATION PROCEDURES: The commander will:

Obtain necessary written statements.

Refer suspended controller to base flight surgeon for documentation of drug abuse on AF Form 422, Physical Profile Serial Report (AFI 48-123), and evaluation of effect of drug use on ATC duty.

Evaluate evidence and facts of the case and determine if the controller is a drug abuser (AFI 36-2701).

A.7.4. DETERMINATION PROCEDURES:

A.7.4.1.If the commander's evaluation did not result in proof of drug abuse:

Return controller to duty.

Notify MAJCOM OPR for ATC.

A.7.4.2.If the controller was identified as a drug abuser, was convicted of violating a Federal or State statute related to drugs, had a positive urinalysis, or self admitted drug use and there was no change in the category stated in the suspension letter, complete commander's cover letter to include:

Allegations made by the suspended controller.

A statement that the withdrawal is for cause.

Any inconsistent data or recommendations in the statements obtained during the investigation.

A.7.4.2.1.Include one of these statements (1C1X1s only) (AFI 36-2206, *Reenlistment in the United States Air Force*):

Member did not receive an SRB.

SRB recoupment and termination is not recommended (followed by rationale).

I recommend SRB recoupment and termination based on withdrawal of the controller's ATCS certificate for cause.

A.7.4.3.If the commander did or did not classify the controller as a drug abuser but substantiated the recommendation for withdrawal with a change in the category stated in the suspension letter, then:

Issue the controller notification of the change with the Change of Recommended Withdrawal Category letter (attachment 10).

Follow checklist for new category.

A.7.5.PROCESSING PROCEDURES:

A.7.5.1.The package must include:

Commander's cover letter.

Change of Recommended Withdrawal Category letter (if appropriate).

Suspension of ATCS certificate letter.

Medical evaluation(s).

OSI and/or security police reports that relate to the drug abuse to include letter of release for inclusion in withdrawal package.

Controller's statement with any attached supporting documents (if appropriate).

Other pertinent documents/statements deemed necessary.

Date all documents and stamp "For Official Use Only". Send original and one copy of withdrawal package to MAJCOM OPR for ATC. Unit will file one copy according to AFMAN 37-138.

A.7.6UNIT ACTION AFTER MAJCOM REVIEW:

A.7.6.1.ATCS certificate withdrawal action taken:

CCTLR voids the ATCS certificate.

Initiate AF Form 2096 action to remove AFSC.

A.7.6.2.MAJCOM does not withdraw ATCS certificate:

Return controller to duty.

Annotate training records.

Attachment 8

ATCS CERTIFICATE WITHDRAWAL CHECKLIST FOR ALCOHOL ABUSE

A.8.1.NameGrade

A.8.2.SUSPENSION PROCEDURES:

Commander issues ATCS certificate suspension letter (attachment 3).

Notify MAJCOM OPR for ATC of ATCS certificate suspension.

A.8.3.INVESTIGATION/EVALUATION PROCEDURES: The commander will:

Get statements from anyone deemed appropriate if alcohol abuse had an adverse impact on the member's duty performance.

Refer suspended controller to base flight surgeon for evaluation of effects of alcohol abuse and verify the controller meets the ATC medical qualifications in AFI 48-123.

Evaluate the statements, medical evaluation(s), Rehabilitation Committee remarks conducted according to AFI 36-2701, nature of incident, and the impact of alcohol abuse on the controller's duty performance.

A.8.4. DETERMINATION PROCEDURES:

A.8.4.1.If the commander's evaluation does not substantiate withdrawal then:

Return controller to duty.

Notify MAJCOM OPR for ATC.

A.8.4.2.If the commander's evaluation determines that withdrawal is warranted or the controller cannot be medically cleared for ATC duty, or the controller refuses rehabilitation, the commander prepares the withdrawal letter to include:

Recommendation for withdrawal from ATC.

Allegations made by the suspended controller.

Recommendation for retention or revocation of authority to wear the ATC badge or a statement that the authority to wear the badge was not given.

Inconsistent data or recommendations in the ATC staff's supporting statements.

A.8.4.2.1.One of the following statements (1C1X1s only) (AFI 36-2606):

Member did not receive an SRB.

SRB recoupment and termination is not recommended (followed by commander's rationale for recommendation).

Recommendation for SRB recoupment and termination based on withdrawal of the controller's ATCS certificate for cause.

Include members enrollment in, or date of previous completion of, an alcohol rehabilitation program. Indicate whether or not program was in-residence or social actions group.

A.8.4.3.If the commander's evaluation substantiated recommended withdrawal with a change in the category stated in the suspension letter, then:

Issue the controller notification of the change with the Change of Recommended Withdrawal Category letter (attachment 10).

Follow checklist for new category.

A.8.5.PROCESSING PROCEDURES:

A.8.5.1The withdrawal package must include:

Commander's cover letter.

Change of Recommended Withdrawal Category letter (if appropriate).

Suspension of ATCS certificate letter.

Medical evaluation(s).

UIF (if established and information is associated with withdrawal case).

Controller's statement with any attached supporting documents (if appropriate).

Pertinent documents/statements deemed necessary (blood alcohol test results, rehabilitation committee remarks, etc.).

Date all documents and stamp “For Official Use Only”.

Forward original and one copy of withdrawal package to MAJCOM OPR for ATC. Unit will file one copy according to AFMAN 37-138.

A.8.6.UNIT ACTION AFTER MAJCOM REVIEW:

A.8.6.1.ATCS certificate withdrawal action taken:

CCTLR voids the ATCS certificate.

Initiate AF Form 2096 action to remove AFSC.

A.8.6.2.MAJCOM does not withdraw ATCS certificate:

Return controller to duty.

Annotate training records.

Attachment 9

ATCS CERTIFICATE WITHDRAWAL CHECKLIST FOR HAZARD/POTENTIAL HAZARD TO FLIGHT SAFETY DUE TO CHARACTER AND BEHAVIOR DISORDER

A.9.1.NameGrade

A.9.2.SUSPENSION PROCEDURES:

Commander issues ATCS certificate suspension letter (attachment 3).

Notify MAJCOM OPR for ATC of ATCS certificate suspension.

A.9.3.INVESTIGATION/EVALUATION PROCEDURES: The commander will:

Get statements from personnel concerned. Include any actions which make the controller a hazard or potential hazard to flying safety:

Refer suspended controller to base flight surgeon to substantiate there are no medical problems which caused the actions for recommended withdrawal and verification that the controller meets the ATC medical requirements in AFI 48-123.

Evaluate statements, medical evaluation(s), and controller's duty performance as related to flying safety.

A.9.4.DETERMINATION PROCEDURES:

A.9.4.1.If the commander's evaluation does not substantiate the recommended withdrawal, then:

Return controller to duty.

Notify MAJCOM OPR for ATC.

A.9.4.2. If the commander's evaluation does substantiate recommended withdrawal with no change in the category stated in the suspension letter, the commander's cover letter will include:

Allegations made by the suspended controller.

An explanation of why the controller is a hazard or potential hazard to flight safety.

Recommendation for retention or revocation of authority to wear the ATC badge or a statement that the authority to wear the badge was not given.

Inconsistent data or recommendations in the ATC staff's supporting statements.

A.9.4.2.1.One of the following statements (1C1X1s) (AFI 36-2606):

Member did not receive an SRB.

SRB recoupment and termination is not recommended (followed by commander's rationale for recommendation).

I recommend SRB recoupment and termination based on withdrawal of the controller's ATCS certificate for cause.

A.9.4.3.If the commander's evaluation substantiates recommended withdrawal with a change in the category stated in the suspension letter, then:

Issue the controller notification of the change with the Change of Recommended Withdrawal Category letter (attachment 10).

Follow checklist for new category.

A.9.5.PROCESSING PROCEDURES:

A.9.5.1.The withdrawal package will include:

Commander's cover letter.

Change of Recommended Withdrawal Category letter (if appropriate).

Suspension of ATCS certificate letter.

Medical evaluation(s).

Controller's statement with any attached supporting documents (if appropriate).

Pertinent documents/statements deemed necessary.

Date all documents and stamp “For Official Use Only”.

Send original and one copy of withdrawal package to MAJCOM OPR for ATC. Unit will file one copy according to AFMAN 37-138.

A.9.6.UNIT ACTION AFTER MAJCOM REVIEW:

A.9.6.1.ATCS certificate withdrawal action taken:

Ensure CCTLR voids the ATCS certificate.

Initiate AF Form 2096 action to remove AFSC.

A.9.6.2.MAJCOM does not withdraw ATCS certificate:

Return controller to duty.

Annotate training records.

Attachment 10

SAMPLE LETTER, CHANGE OF RECOMMENDED WITHDRAWAL CATEGORY

MEMORANDUM FOR (Controller Concerned)

FROM:(Unit Commander)

SUBJ: Change of Recommended ATCS Certificate Withdrawal Category

1.This is to inform you the evaluation/investigation of your case resulted in a change of category to my letter, (date), Subject: ATCS Certificate Suspension and Pending Withdrawal. You are hereby recommended for withdrawal under the provisions of AFI 13-203. (Statement of substance of cause for change in recommended withdrawal category.)

2.You may consult with legal counsel and may submit any written statement or documentary evidence you believe should be considered reference the change of recommended withdrawal category.

3.Acknowledge receipt of this communication by endorsement below within five work days. Any statements or documents which you wish to be considered should be submitted with the return of your endorsement.

(Signature of Unit Commander)

1st Ind(*date*)

FROM: Controller)

TO: (Unit Commander)

1.Acknowledgment of receipt of change to recommended category of ATCS certificate withdrawal

2.I have been afforded the opportunity of consulting with legal counsel regarding this action. I was counseled by (name), (grade and title, if military), (address, if civilian)/I declined legal counsel.

3.I have/have not attached a statement in my own behalf.

4.I agree/disagree with the proposed action.

NOTE: If change of category is from Fear of Controlling (medical) to "Other", then add the following paragraph.

5.I understand withdrawal action under the category of "Other" may result in:

a. ATCS certificate removal for "cause" (initial).

b. Termination/recoupment of SRB (initial).

c. Possible administrative discharge action (initial).

(Signature of Controller Concerned)

(Name, Grade, USAF)

***NOTE**: Controller will initial directly above the phrases lined out in the endorsement.*

Attachment 11

CONTROLLER DEVELOPMENT PROGRAM OPERATING INSTRUCTION

A11.1. This Operating Instruction (OI) must establish policy and procedures for implementing the unit Controller Development Program (CDP) and it must define the responsibilities of all personnel involved in the training process. The program must expand those areas where further explanation is required and standardize local upgrade, qualification, recurring, and review training procedures. Outline all training programs in this OI, e.g., ATCTD System Administrator qualification training program, 5-level upgrade training, TERPs qualification training.

A11.2. RESPONSIBILITIES. Training must be a coordinated effort between the AOF/CC, CCTLR, CATCT, CSE or TSN, CATCA (if applicable), task certifier, supervisor, watch supervisor, trainer, and trainee. Outline unit training team membership and responsibilities in this OI; e.g., who maintains officer records, who ensures AF Form 2096 action is complete.

A11.3. UPGRADE TRAINING. Outline program schedules, administrative actions (CDCs, PC III process, SEI), and additional instructions (documentation, requests for certification) for skill level advancement. Upgrade training shall be according to AFI 36-2201, AFI 13-203, and the 1C1X1 CFETP. Additionally, the CATCT or TSN will integrate AFJQSs, ATC training series, simulator programs, non-radar programs, and command training products into certification guides to meet upgrade training requirements for 5- and 7- skill levels.

A11.4. RECURRING TRAINING. Describe what, how, and when recurring training is administered and documented. Recurring training is defined in Attachment 1, Section C -- Terms:

A11.4.1. Mandatory. See chapter 6.

A11.4.2. Other. Training conducted to ensure personnel remain current on local skill requirements.

A11.5. REVIEW TRAINING. Review training is defined in Attachment 1, Section C -- Terms:

A11.5.1. Review training may be initiated by HQ AFFSA , MAJCOMs, other command levels, or facility personnel. The CATCT will ensure all review training is prepared and conducted according to appropriate tasking directives.

A11.6. QUALIFICATION TRAINING. Qualification training is defined in Attachment 1, Section C--Terms:

A11.6.1. Management and Specialized Training. Establish procedures for how and who will administer and track qualification training for management and specialized duty positions. As a minimum, identify the following areas: CCTLR, CATCT, CSE or TSN, CATCA (if applicable), TERPS, ATCTD System Administrator, watch supervisor, task certifier, and trainer.

A11.6.2. Facility Rating/Position Certification Training. As a minimum, establish the following procedures:

A11.6.2.1. Qualification to work live traffic. Identify, by facility, how and who will validate a trainee's ability to perform in a live position.

A11.6.2.2. Local documentation requirements, to include automation procedures if used.

A11.6.2.3. Requests for certification and processing channels.

A11.6.2.4. Radar simulator usage and nonradar training requirements

A11.6.2.5. Position certification/Facility rating time limits

A11.7. PROFICIENCY TRAINING/TESTING. Establish monthly proficiency training and test schedules, pass and fail criteria, review and retest procedures, and follow-up actions. Include required recurring and review training areas, as appropriate. If applicable, also establish quarterly proficiency training requirements for the AUS workcenter.

A11.8. DUAL QUALIFICATION/CERTIFICATION PROGRAMS. Identify procedures, establish training requirements, and explain procedures for maintenance of proficiency.

A11.9. NEWCOMER'S INDOCTRINATION PROGRAM. Establish an indoctrination program that fulfills local requirements using AT-M-08 as a reference guide.

A11.10. 3-LEVEL TASK EVALUATION PROCEDURES (3 Month On-The-Job-Experience). Outline facility program schedules, administrative policy, documentation requirements, radar simulator usage, procedures for task evaluation, and additional instructions requiring standardization; e.g., deferred tasks, procedures identifying when to complete and process a Field Evaluation Questionnaire. Establish test schedules, pass/fail criteria, review/retest procedures, and follow-up actions.

A11.11. TRAINING REVIEW BOARD. Establish administrative policies and procedures to include frequency of meetings, board membership, and agenda.

A11.12. DOCUMENTATION. Establish local documentation requirements, to include automation procedures if used. Establish manual documentation procedures which are effective when automation procedures are inoperative. Identify procedures for trainer and task certifier appointment.

A11.13. WEATHER TRAINING PROCEDURES. Identify what, when, and how local weather training is conducted. At a minimum, outline controller responsibilities for the following weather training procedures: Cooperative Weather Watch Program, Tower Visibility Observation Certification, and ATC Weather Familiarization. Identify who certifies control tower personnel to take visibility observations and identify who conducts annual visibility training for recertification. Outline familiarization training for weather personnel (what, when, and how familiarization training is accomplished).

A11.14. COMBAT SKILLS FAMILIARIZATION TRAINING. Establish a combat skills training program that fulfills basic USAF and ATC war fighting requirements identified in AFI 10-403, AFMAN 13-220, and chapter 14 of this regulation. Establish training requirements, identify qualification procedures, and explain procedures for maintenance of combat skills proficiency for ATC personnel UTC-tasked. Identify who in ATC is responsible for coordinating training requirements and developing realistic objectives/scenarios for local exercises.

Attachment 12

POSITION CERTIFICATION GUIDE (SAMPLE FORMAT)

Name:_____ Start Date:_____

Trainer:_____Supervisor:_____

INTRODUCTION: The Flight Data (FD) Certification Guide must be completed by all personnel in training for FD certification. The guide is broken into 5 blocks. Each block contains time limits, required learned capabilities, knowledge/performance standards, and measurable objectives designed to train, evaluate, and certify the trainee on knowledge/tasks required for certification in the FD position. An asterisk (*) will be used to identify a JQS/AF Form 797 item that is carried forward into the next block of training. The task certifier will annotate the completion of each task/block in this guide or the appropriate AFJQS or AF Form 797 according to AFI 13-203 and AFI 36-2201. Once facility certification training is completed on the task(s), further training is not required, unless otherwise noted.

INSTRUCTIONS: Apprentice trainees must achieve the standards established for Block 1, before advancing into Block 2, and so forth. Apprentice controllers must not begin working live traffic prior to completing Block 1. AFJQS/AF Form 797 knowledge/task(s) items shall not be documented closed until the trainee has achieved the standards established by the Chief Controller (CCTLR). Projects listed in the FD PCG, shall be completed by apprentice and non-prior tower facility rated controllers, before documenting certification of the task/knowledge item. Prior tower rated controllers shall complete the projects only when not previously trained on those task/knowledge items. This guide must accompany the training records when recommending the trainee for a block advancement.

TRAINING TIME LIMITS FOR FD CERTIFICATION

Apprentice Controller112 Hours

5/7 Level WITHOUT Prior Tower Experience73 Hours

5/7 Level WITH Prior Tower Experience51 Hours

BLOCK I

Start Date:_____ Estimated Completion Date:_____

BLOCK OBJECTIVE: Demonstrate the knowledge/skill of equipment usage associated with the flight data position as described in the tasks below; demonstrate the ability to formulate and record ATIS messages without error; properly fill out facility forms with minor typographical errors.

AFJQS - AF FORM 797 TASK/KNOWLEDGE ITEMS: 2a(1), 2a(3), 2b, 2c, 2d(2), 2d(3), 2g, 2m, 3m, 3t, 3nn, 3vv, AF Form 797 Task #10.

RECOMMENDED TIME FOR BLOCK 1 REQUIREMENTS:

Apprentice Controllers **WITHOUT** prior ATC experience20 hours

5/7 Level Controllers **WITHOUT** Prior Tower Experience15 hours

5/7 Level Controllers **WITH** Prior Tower Experience10 hours

TASK 1Define Facility Forms

JQS: 3m

TR: AFI 13-203; Tower OI 13-4 and 13-5

OBJECTIVE: Without reference, "Define Facility Forms"' to include the form numbers and purpose of each form. Identify the forms most commonly used by the tower in daily operations, administration, and training; (e.g., AF Form 3616, **Daily Record of Facility Operation**; AF Form 3626, **Position Log**; AF Form 3624, **Equipment Outage Log**; FAAO 7230-8 or 7230-7-2, **Flight Progress Strip**; AF Form 623, **On-the-Job Training Record**; AF Form 623a or suitable substitute, **On-the-Job Training Record-Continuation Sheet**; AF Form 1098, **Special Task Certification and Recurring Training).**

Knowledge standard: Complete an oral or written test with no more than 20% in error. *Practical Application standard:* State the nomenclature, form number and use of each form identified above. Demonstrate the ability to properly fill out each form according to established directives. Only minor typographical errors are allowed.

TASK 2Console Clocks

JQS: 2a(1)

TR: FAAO 7110.65, AFI 13-203, Tower OI 13-3, and Trainer.

OBJECTIVE Without reference, explain and perform the procedures for setting facility clocks, the agency contacted for a time check, and when clocks must be checked without error. Using the facility clock and the appropriate landline, obtain a time check from the appropriate agency and set the facility clock to within +/- 2 seconds of the time check. In a live/simulated situation, demonstrate the actions necessary whenever the facility goes to back-up power without error.

TASK 3 *Flight Data Input/Output (FDIO)

JQS: 2b

TR: AT-E-16, Flight Data System (FDS II) Operators Manual; Tower OI 13-8, and Trainer.

OBJECTIVE: With minimal trainer assistance, use the appropriate checklist to describe/demonstrate the operation of the "Flight Data Input/Output" system, to include adjusting the monitor, changing strips, performing a printer test, setting printer controls, and making keyboard entries, with no more than 5% error.

PROJECT: Start AT-E-16.

Block 1

PROGRESS CHECK

1. An evaluation by the trainer and supervisor will determine if the above standards are met. Once the trainee meets the standards for each JQS task/knowledge item identified in Block 1, then the trainer should schedule the Block 1 test with the CATCT/TSN. When the trainee successfully completes the block test then the trainee should be advanced into Block 2. Standards that allow for error, should be corrected to 100% prior to advancing into the next block.

2. The following JQS task(s) are to be signed off: 2a(1), 2b, 2c, 3m

3. The task certifier shall verify that the completed Block 1 JQS item(s) have been documented and the trainee meets task certification standards.

Date Block 1 Completed:

Total Position Hours Used:

Trainee’s Initials:

Trainer’s Initials:

Task Certifier’s Initials:

Total Block Hours Used:

CCTLR:

CATCT: _____

Attachment 13

MASTER TECHNICAL AND TASK REFERENCE (SAMPLE)

A13.1. Technical References.

Table A13.1. Index of Publications.

Publication	Title	Date
AF INDEX 2	Air Force Publications	3 Feb 97
AF INDEX 25	Air Force Index of ATC Training Publications	28 Feb 97

Table A13.2. CD-ROMs.

Publication	Title	Date
AFEPL	AF Publication Library	Mar 97
CBTPROGAMLIBRARY	Computer Based Training Publication Library	Jan 97

Table A13.3. FAA Publications.

Publication	Title	Date
FAAO 7110.65J	Air Traffic Control	20 Jul 95
FAAO 7220.1A	ATC Certification Procedures	18 Aug 76
FAR Part 65	Certification	6 Jul 92

Table A13.4. Air Force Regulatory Guidance (MAJCOM [Numbered AF, if applicable] and

Above).

Publication	Title	Date
AFI 11-206	General Flight Rules	1 Dec 96
AFI 36-2222	ATC Training Publications	6 May 94
AFI 36-2234	Instructional System Development	1 Nov 93

Table A13.5. Local Guidance (Wing Level and Below).

Publication	Title	Date
KAFBI 13-203	Kadena AFB Air Traffic Control	26 Dec 96
DOI 13-203	66 OSS Controller Development Program Operating Instruction	2 Nov 96
MAT-M-03	Macdill AFB Watch Supervisor Task Certification Guide	5 July 96

A13.2. Sample Tower General Certification Guide (GCG).

Table A13.6. Sample of Explanation of Abbreviations.

	Explanation of Abbreviations	
LOA - Letter of Agreements	ATCTS - Air Traffic Control Training Series	EACL - Emergency Action Checklist
PRF - Permanent Read File	LOP - Letter of Procedure	MOU - Memorandum of Understanding
p - Paragraph	gl - Glossary	atch - Attachment
tbl - Table	c - Chapter	s - Section

Table A13.7. Sample of Description of Tower General Certification Guide.

AFJQS Item	FAAO7110.65(.65)	AFI13-203(203)	Base Instruc-tion(BI)	AOF OI(AOI)	OPLAN LOAsLOPs	ATCTS-sEA-CLPRF	Other
1. Operational Area:Define/ Describe:a. Airspace classifications(3) Class C	.65/p7-8; .65/gl, controlled airspace		BI/atch3		LOA5, p2LOA7, p6	CBT-G-22	
(4) Class D	.65/gl, controlled airspace		BI/5.3, BI/5.3.1, BI/atch5		LOA5, p3		
b. Your designated airspace			BI/atch5		LOA5, p3		
h. Traffic patterns for all airports served			BI/4.2, BI/4.4, BI/atch2		LOA2, p2	PRF s1	AFI 11-206, p5.9.2, p5.9.3

o. NAVAIDs (location,bearing, distance, identification, frequency)(5) ILS	.65/Tbl 4-1-1 G: decision height & ILS Cat 1	203/ p2.23203 /p2.24	BI/ 2.1.1.2, BI/4.11, BI/5.2, BI/ 5.3			PRF s2c	AFI 11-206, p8.14; IFR Sup XXX; FLIP Low

NOTE: When developing a computerized MTTR ensure consistency is maintained throughout the document. For example, when listing FAAO7110.65 paragraphs ensure all TRs are prefaced with .65/ or when listing AFI 13-203 paragraphs ensure all TRs are prefaced with 203/. This will enable the computer program (i.e., Microsoft Word, Excel) to “find” and “replace” the proper items. If just paragraph numbers are listed under the applicable headings (i.e., under AFI 13-203 paragraph 6.15 is listed and also under NAFBI 13-203 paragraph 6.15 is listed) the computer will identify both references during the “find/ replace” function. When the product has a unique name (i.e., AT-M-03) there is no need to preface the TR.

Attachment 14

PROCEDURES FOR ESTABLISHING VFR FLYING AREAS AND TRAFFIC PATTERNS

A14.1. VFR Traffic Patterns:

A14.1.1. When designing traffic patterns, be sure that:

A14.1.1.1. They conform to the requirements of paragraphs A14.2. and A14.3. below except when safety or noise problems require adjustments.

A14.1.1.2. No unusual or unnecessary maneuvering is required.

A14.1.2. When traffic patterns for two or more airfields are close together or overlap, coordinate letters of agreement regarding safe operations. The Airfield Operations Board reviews these letters of agreement.

A14.1.3. Coordinate revised traffic patterns with ATC agencies and the MAJCOM.

A14.2. VFR Traffic Pattern Types:

A14.2.1. Establish rectangular and overhead patterns at each Air Force airfield, joint-use airfield, and overseas airfield controlled by the Air Force. Use letters of agreement to provide the desired traffic pattern at airfields under the control of foreign governments or agencies other than the Air Force. Usually, traffic patterns use a left-hand traffic flow; however, you may use right-hand patterns if required.

A14.2.2. Develop closed traffic procedures. Closed traffic is a maneuver which allows an aircraft making successive patterns to stay in the normal traffic flow without exiting and reentering the pattern.

A14.2.3. Bases may establish an additional rectangular pattern for light aircraft. This pattern provides adequate separation from normal rectangular and overhead pattern traffic.

A14.2.4. Establish separate helicopter patterns, if needed. You don't need these patterns if the rectangular or light aircraft patterns meet operational needs without creating congestion.

A14.3. VFR Traffic Pattern Altitudes. Establish traffic pattern altitudes to the nearest 100-foot level relative to the airfield elevation. For example, the traffic pattern altitude for a 1,000 foot traffic pattern with a field elevation of 245 feet would be 1,200 feet above mean sea level. Traffic pattern altitudes must provide a minimum of 300 feet obstruction clearance within 1 mile either side of the established ground track. Establish traffic pattern altitudes as follows:

A14.3.1. Rectangular pattern: 1,000 feet above field elevation (1,500 feet if a lower altitude causes a noise problem).

A14.3.2. Overhead pattern: 1,500 feet above field elevation (2,000 feet if the 1,500 foot rectangular pattern is used or if a lower altitude causes a noise problem).

A14.3.3. Light aircraft pattern: At least 500 feet above field elevation. In all cases, ensure adequate separation from normal rectangular pattern traffic.

A14.3.4. Helicopter patterns: Establish specific altitudes that ensure adequate separation from traffic in other patterns.

A14.3.5. Closed traffic: The altitude specified usually corresponds to the altitude of the pattern for which closed traffic is established.

A14.4. Disseminating Flight Information. When issuing directives or establishing agreements:

A14.4.1. Provide copies to nearby civil and military airfields, ATC agencies, FAA FSSs, FAA Flight Standards District Offices, and other interested parties.

A14.4.2. Send a description of VFR departure or arrival routes to AFFSA/XO for entry in FLIP Area Planning.

A14.4.3. Send a description of any traffic pattern that deviates from standards as approved by the MAJCOM, to HQ AFFSA/XO, for entry in FLIP.

A14.4.4. Ensure airfield management specialists display or inform transient aircrews of local departure procedures and significant airfield hazards or conditions.

A14.4.5. Contact the Air Force Representative (AFREP) at the appropriate FAA region for guidance if traffic flow conflicts arise that cannot be resolved locally. Also notify the MAJCOM OPR.

A14.5. Environmental Impact Analysis and AICUZ. Before making changes to local VFR flying areas, VFR traffic patterns, or altitudes, analyze proposals for impact based on the published AICUZ study and potential environmental impact. Submit AF Form 813, Request for Environmental Impact Analysis, to the base civil engineering environmental planning staff for approval (see AFI 32-7004). The Environmental Impact Analysis Process must be completed prior to making any decision to implement the proposed change. Advise the base civil engineer when the proposed change has been implemented.

Attachment 15

BASE LEVEL ASSESSMENT (BLA)

A15.1. Concept: In support of the two major regional contingency (MRC) scenario, ATC and base operations personnel will deploy to wartime locations while others remain in-place to support operations at CONUS bases. Airfield operations support for CONUS bases during a two MRC scenario is vital. This includes the requirements to control delegated airspace in the National Airspace System (NAS) during contingencies since the FAA may not be manned to assume the responsibility. To meet this goal, nonessential activities will be reduced to a minimum. Essential activities will continue or expand depending on the situation.

A15.2. DETERMINING IN-PLACE MANPOWER REQUIREMENTS:

A15.2.1. Tasks. Review wartime support requirements for airfield operations and determine the number of personnel required (in-place and deployable). Bases apply the matrixes for their respective facilities and identify and document, by AFSC, each position which is required to accomplish in-place wartime support functions. Provide justification to the MAJCOM to validate variances to the matrix. The matrixes are BLA standards only and should not be used in peacetime manpower reviews.

A15.2.2. Assumptions.

A15.2.2.1. Use authorization, NOT personnel assigned to conduct this assessment.

A15.2.2.2. Military experience levels in CONUS will rapidly decline as experienced military members deploy to the theater.

A15.2.2.3. Commanders will implement expanded hour work weeks (10 hours/day, 6 days/week to include civilians).

A15.2.2.4. The term sustaining will also apply to theater bases that are not contingency beddowns or used as through ports.

A15.2.2.5. Categories A and B-Full and continuous operations is considered 24 hours/day, 7 days a week operations, categories C and D-partial operations is considered 12 hours/day, 7 days a week operations, and categories E and F no flightline operations means the airfield is closed (see paragraph 2d).

A15.2.2.6. Primary CONUS missions are strategic airlift and pilot training at AETC bases. Pilot training will not surge.

A15.2.2.7. Limited flying at fighter bases (less than a squadron of aircraft on base).

A15.2.2.8. All leaves and non-deployment TDYs are canceled.

A15.2.2.9. The Defense Planning Guidance (DPG) determines the type of scenario used for determining BLA. Currently, 2 MRC scenario is used to size the force.

A15.2.3. Planning Factors.

A15.2.3.1. Hours of operations for radar approach controls (RAPCONs) and ground control approaches (GCAs) are independent of base flightline operations since they are an integral part of

the National Airspace System (NAS) while tower, radar final control, and base operations will vary depending upon the hours of operations of the airfield.

A15.2.3.2. PAR services terminated, except at pilot training locations where required by operational community (PAR must be in training syllabus as check ride item).

A15.2.3.3. Combine positions where traffic permits.

A15.2.3.4. 3-level authorizations are required in-place in order to continue training. (facility qualified 3 levels can be substituted for 5 levels)

A15.2.3.5. Requirements must be based on the emergency work week of 10 hours per day, 6 days per week, or a 60 hour week. See WMP-1 Annex Z for more detailed information. Note: You may need to consider total manhours for the facility, not by position, in calculating the 60 hour work week for manpower purposes.

A15.2.3.6. RAPCONs/GCAs at locations with no flightline operations (categories E and F) will need to find an alternate source for weather information. See FORSIZE/BLA Annex CC, Weather for more details.

A15.2.3.7. Administrative specialists revert to the control of the squadron.

A15.2.3.8. Few practice approaches flown at other than AETC bases.

A15.2.4. Suggested Steps:

A15.2.4.1. Use the UMD to determine number of authorizations.

A15.2.4.2. Find the Base Use category for your base. Your plans office should have this information. That will determine the hours of operations for your facilities.

A15.2.4.3. Estimate traffic loads. If most of the wing is deployed, then civil traffic may be your only workload.

A15.2.4.4. Determine minimum number of positions required for each facility to support operations.

A15.2.4.5. Using the 10 hr work day, determine the minimum number authorizations needed to support the in-place mission (e.g., multiply the number of shifts by the number of positions required. Add a chief controller position. This number is your BLA (in-place requirements). With the 10 hr day standard you may need to do some creative scheduling.

A15.2.4.6. Compare your number with the matrixes and justify any variances for additional manning above the wartime standard.

A15.2.4.7. The difference between authorized and BLA should be your UTC numbers and allow for up to 2 DNICs per complex.

Airfield Operations In-place Requirements Charts

Table A15.1. AIRFIELD MANAGEMENT AND BASE OPERATIONS MANNING (1C0X1)

Positions	Cat A/B	Cat C/D	Cat E/F/G
Airfield Manager	1	1	1
Base Ops Controllers	7 Note 2	6 Note 2	2
FLIP Manager/ Aircrew Briefer/COMSEC	1Note 3		
TOTAL	9	7	3

NOTES:

1. Manning is based on a minimum of “two” operations controllers for all shifts.
2. Base Ops Supervisor will augment the airfield manager and supervise Base Operations activities.
3. Full and continuous contingency operations, will require increased support for aircrews.
4. The Quality Assurance position at AETC bases is required.

Table A15.2. AIR TRAFFIC CONTROL MANNING (13MX & 1C1X0)

Positions	A/B	C/D	E/F
Flt Support Element	2	2	1
Tower Element	9	7	4
RAPCON Element	25	20	20
GCA Element	13	10	10
RFC Element	N	N	N

N-Not Required except as noted in paragraph 2c(2).

NOTES:

1. Matrix does not include three levels (includes 2c(4)).

2. Flight Support Element positions (2): AOF/CC and CSE/CATCT (TSN). CAM in airfield management matrix.

3. Tower (2 & Chief Controller): Local, Ground/Flight Data. Cat E/F required to open facilities upon return of aircraft while awaiting deployed controllers return.

4. Radar (6 & Chief Controller): Approach, Approach Assist, Departure, Departure Assist, Arrival, WS (Senior controller on mid shifts), and Clearance Delivery (required to support wing flying only).

5. GCA (3 & Chief Controller): Arrival, Assist, WS (senior controller on mid shifts).

6. Facility position requirements are for each shift.

Sample reporting format (excel spreadsheet will be provided by AFFSA/XAXW)

Base	Authorized	In-place required	Deployment (UTC) Taskable
TWR			
1C191			
1C171			
1C151			
1C131			
RDR			
1C100			
1C171			
1C151			
1C131			
AM/Base Ops			
1C091			
1C071			
1C051			
1C031			
Civ			

Attachment 16

REQUIRED LOP AND BASE AIRFIELD OPERATIONS INSTRUCTION ITEMS

Table A16.1. Required Base Airfield Operations Instructions Items.

SUBJECT	SOURCE
Standard Go-around Procedures	AFI 13-203, Para 1.10.11.1.
Precision Approach Areas	AFI 13-203, Para 2.26.
Hours of Operation	AFI 13-203, Para 2.1.
Multiple Approach and ASLAR Procedures	AFI 13-203, Para 2.11.5.4.
Opposite Direction Traffic	AFI 13-203, Para 2.13.
Primary Crash Alarm System	AFI 13-203, Para 2.16
Continuity of Air Traffic Services	AFI 13-203, Para 2.25.
Control of Ground Traffic and Vehicles (Recall Procedures)	AFI 13-203, Para 3.3.
Protection of 360 Overhead	AFI 13-203, Para 3.7.
Air Base Defense	AFI 13-203, Para 4.12.
ASR Wind Limitations	AFI 13-203, Para 4.14.
Multiple Radar Final Control Requirement	AFI 13-203, Para 4.19.
Arresting Systems	AFI 13-203, Para 5.2.
Aircraft Priorities	AFI 13-203, Para 5.4.
Reduced Runway Separation	AFI 13-203, Para 5.5.
Min Comm/Comm-out Procedures	AFI 13-203, Para 5.8.
Hot Brake or Hot Gun Procedures	AFI 13-203, Para 10.5.4.
Inflight Emergency Response	AFI 13-203, Para 10.5.4.
Noise Abatement	AFI 13-203, Para 10.5.4.
Tower Responsibility For Aircraft Movement Area	AFI 13-203, Para 10.5.4.
Intersection Takeoff Diagram	AFI 13-203, Para 11.3.1.
Airfield Operations Board Membership	AFI 13-203, Para, 12.5.2.
Airfield Operations Board Agenda Items for Review	AFI 13-203, Para 12.5.4.
Traffic Patterns/Local Flying Area	AFI 13-203, Atch 14.

NOTE:

This list is not intended to be all-inclusive. Each location is responsible for determining any additional requirements, or listed requirements that do not apply.

Table A16.2. .Required LOP Items.

SUBJECT	SOURCE
ATCALS Restoration Policies	AFI 13-203, Para 1.6
Emergency Warning and Evacuation Alarm Notification Procedures	AFI 13-203, Para 2.6
Multi-Channel Recorder Procedures	AFI 13-203, Para 2.7.
Alternate Communications	AFI 13-203, Para 2.10
Radar and Tower Coordination	AFI 13-203, Para 2.11.5.1
Interruptions to ATCALS/Maintenance, ATC Coordination	AFI 13-203, Para 2.20.2
NAVAID Status Reporting	AFI 13-203, Para 2.21.2
ILS Critical Area (Snow Removal)	AFI 13-203, Para 2.21.2.1.
NAVAIDs Without Internal Monitors	AFI 13-203, Para 2.21.4
Procedures for Placing ATCALS on Back-up Power	AFI 13-203, Para 2.22.
Bypassing Interlocks (Multiple ILS Facilities)	AFI 13-203, Para 2.23.2.3
Alternate ATC Facility Operations	AFI 13-203, Para 2.25.
Supervisor of Flying (SOF)	AFI 13-203, Para 5.3
Control Tower Operations	AFI 13-203, Para 10.5.3.
CENRAP Operations	AFI 13-203, IC 97-1, Para 4.23
Radar Operations	AFI 13-203, Para 10.5.3.

NOTES:

1: Numerous procedures/practices should be included in a single O.I., e.g., TPX-49 and PIDP procedures should be included in the Radar Operations O.I. Wind limitations and runway-in-use procedures would be included in the Control Tower Operations O.I.

2: This list is not intended to be all-inclusive. Each location is responsible for determining any additional requirements, or listed requirements that do not apply.

Attachment 17

IC 98-1 TO AF1 13-203, AIR TRAFFIC CONTROL

SUMMARY OF REVISIONS

This change incorporates interim change (IC) 98-1 which adds GS-2152 (civilian) to qualifications for CCTLR, CATCT, CSE, and TERPS (1.1.4.1.1., 1.1.5.1.1., 1.1.7.1.1., and 1.1.13.1.1.); further defines facility rating, position certification, and position currency requirements at short tour locations for the CATCT, CSE, and TSN (1.1.5.1.2., 1.1.7.1.2., and 1.1.14.1.2.); adds 13MX to watch supervisor qualifications (1.1.8.1.1.); clarifies selection authority for watch supervisors (1.1.8.1.3.); further defines Chief, ATC Automation (CATCA) responsibilities, paragraphs 1.1.9.1.2., 1.1.9.1.4., 1.1.9.2.2.5., 1.1.9.2.4.1. through 1.1.9.2.4.4.; deletes redundant CATCA responsibilities, paragraphs 1.1.9.2.7. through 1.1.9.2.11.1.; further defines ATC Automation Specialists qualifications (1.1.10.1.3. and 1.1.10.2.3.); redirects overall responsibility for TERPS from WG/CC to OG/CC (1.1.13.); amends one aircraft at a time requirement (1.5.); adds Emergency Staffing Level guidance, 1.5.8. through 1.5.8.5.; incorporates new recorder and tape procedures and nomenclature (1.9., 2.7.1., 11.2., 11.5., 11.6.1., 11.8., and 11.8.2.); further defines Airfield Operations Flight (AOF) officers ATC experience requirements (1.3.1.1.); further defines the types of facility operating instructions not to send to MAJCOM (1.10.2.); deletes all references to ASLAR (2.3., 2.11.5.3., 4.9.5., 6.7.3.); stipulates MAJCOM authority for installing emergency warning and evacuation alarms (2.6.); expands guidance for snow affects on glide slopes (2.21.2.1.); clarifies software maintenance support (2.27.1.2.); requires MAJCOM to forward authorized/approved functional use of tower radar displays to AFFSA/XA for review (3.5.); amends and expounds upon the Arrival/Departure separation criteria (3.9.); clarifies certification/validation process for ATCALS (4.11.2.); adds MSAW operational check requirements (4.15.1.); clarifies Diverse Vector Area (DVA) procedures (4.17.1.2., 4.17.1.2.3., 4.17.5.); adds operations and procedures requirements for Center Radar Presentation (CENRAP), paragraphs 4.23 through 4.23.9.1.2.; deletes AUS TCG training requirements (6.3.3.1.1.); amends minimum AUS TCG requirements (6.3.3.2.); clarifies Combat Skills Familiarization Training with respect to SEI issuance (6.5.1.3. and 6.6.6.); further defines TERPs knowledge/task items certification exemption (6.6.2.2.); adds NOTE to ATCTD (6.7.); adds CENRAP to semi-annual training requirements (6.12.13.); removes the requirement to document results of special evaluations on daily events log (8.7.1.1. and 8.7.1.2.); clarifies drug and alcohol abuse AFSC withdrawal procedures (9.3.2.2.); provides MAJCOM authority to select date to review current indexes (10.6.); revises traffic count program, paragraphs 11.18.1.1. through 11.18.3.; deletes JANAP 146E and AFMAN 13-214 from attachment 1 (references); deletes ASLAR and adds (DAT) to attachment 1 (abbreviations); amends definition of RFC facility and multiple approach in attachment 1 (terms); adds a definition for RFC service in attachment 1 (terms); separates attachment 14 into two attachments (14 and 15); amends BLA Report to every other year and adds note for USAFE and PACAF (14.1.1.7.); corrects applicable plans to be familiar with (14.1.2.1.); corrects reference from AFI to AFM (14.1.4.); further defines UTC tasked controllers mobility equipment requirements (14.2.2.4.); changes USAF WMP, all volumes (U) to (S) (14.4.8.); adds attachment 16 (Required LOP and Base Airfield Operations Instruction Items) tables A16.1. and A16.2.,

and incorporates guidance (1.10. and 10.5.); and adds attachment IC 98-1. AHindicates revisions from the previous edition. See attachment IC 98-1 for the complete IC.

1.1.4.1.1. Must hold AFSC 1C100, 1C191, 1C171, or GS-2152 (civilian), have performed ATC duties for at least 5 years (not including instructor duty), and have 1 year experience in the type facility to manage, excluding RFC.

1.1.5.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and have performed duties in AFSC 1C1X1 for at least 5 years (not including instructor duty).

1.1.5.1.2. Must be facility-rated, including coordinator positions, in all facilities, before assuming duties (except at short tour locations), and maintain proficiency/currency. At RAPCON locations with high density traffic (more than 25,000 operations quarterly), or at short tour locations, the CATCT must maintain proficiency/currency in approach control, assistant approach control, and local control positions rather than all positions.

1.1.7.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and have performed duties in AFSC 1C1X1 for at least 5 years (not including instructor duty).

1.1.7.1.2. Must be facility-rated, including coordinator positions, in all facilities (except at short tour locations), before assuming duties, and maintain proficiency/currency. At short tour locations the CSE will maintain proficiency/currency in the most complex facility. An assistant CSE (CTO examiner when appropriate) must be available to perform certifications and ratings in the facilities in which the CSE is not rated.

1.1.8.1.1. Must hold AFSC 1C100, 1C191, 1C171, or 13MX, have performed duties in AFSC 1C1XX/ 13MX for at least 4 years (not including instructor duty or OTP), and have one year’s experience in type facility to supervise, excluding RFC.

1.1.8.1.3. Must complete the facility WS Task Certification Guide prior to performing duties as a WS and be selected/appointed by the CCTLR.

1.1.9.1.2. Must become position certified or facility rated within 6 months of initial assignment to the CATCA position and maintain proficiency/currency as specified by the AOF/CC. Minimum certifications to obtain are approach control and assistant approach control (equivalent positions for enroute/range facilities) or arrival control and assistant arrival control in GCA facilities. Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility. *EXCEPTION:* MAJCOMs may or may not require GS-2152 CATCAs to obtain position certifications. If MAJCOMs do not require position certifications for GS 2152 CATCAs, they will be required to monitor/observe facility operations as specified by the AOF/CC. This is to ensure an understanding of the operations and requirements of the local air traffic control system.

1.1.9.1.4. (Added) Must complete the CATCA AF Form 797 task items and CATCA Task Certification Guide within 6 months of initial assignment to the CATCA position.

1.1.9.2.2.5. Coordinates with the TERPS Specialist to obtain the MAJCOM approved MSAW and MVA data. Responsible for the automated ATC radar system database administration of site adaptation, MSAW, and digital mapping. Manages the continuous data recording (CDR) and playback systems.

1.1.9.2.4.1. Provides the CATCT, as a minimum, with quarterly proficiency training inputs for the ATC automation workcenter proficiency test.

1.1.9.2.4.3. Ensures all AUSs complete the monthly controller and quarterly AUS proficiency tests developed by the CSE.

1.1.9.2.4.4. Ensures all training record discrepancies, as identified in the CATCT’s training record inspection results report, are corrected monthly.

1.1.9.2.6.2. (Added) Ensures all assigned automation specialist's meet appropriate flight physical qualification requirements according to AFI 48-123, *Medical Examination and Standards* (FAA medical standards for GS-2152 personnel).

1.1.9.2.6.3. (Added) Specifies responsibilities/duties of Assistant CATCA (ACATCA) in writing.

1.1.9.2.7. DELETED

1.1.9.2.8. DELETED

1.1.9.2.9. DELETED

1.1.9.2.10. DELETED

1.1.9.2.11. DELETED

1.1.9.2.11.1. DELETED

1.1.10.1.3. Must become position certified or facility rated within 6 months of initial assignment to the AUS position and maintain proficiency/currency as specified by the AOF/CC. Minimum certifications to obtain are approach control and assistant approach control (or equivalent positions for enroute/range facilities) or arrival control and assistant arrival control in GCA facilities. Additional certifications, determined by the AOF/CC, should be based on the complexity of the facility. *EXCEPTION:* MAJCOMs may or may not require GS-2152 AUSs to obtain position certifications. If MAJCOMs do not require position certifications for GS 2152 CATCAs, they will be required to monitor/observe facility operations as spec-

ified by the AOF/CC. This is to ensure an understanding of the operations and requirements of the local air traffic control system.

1.1.10.2.3. Performs system updates. Integrates the automated ATC radar system's site adaptation, MSAW, and digital map databases.

1.1.13. Terminal Instrument Procedures Specialist (TERPS) NCO. The OG/CC is responsible for the base TERPS program. The AOF/CC will appoint a Unit TERPS NCO to manage the day-to-day operation.

1.1.13.1.1. Must hold AFSC 1C191, 1C171, or GS-2152 (civilian), and complete course E3OZR13B4A-000, (Automated) Terminal Instrument Procedures. *NOTE*: Graduates of Terminal Instrument Procedures course E30ZR1611-00 meet this requirement.

1.1.14.1.2. Must be facility-rated, including coordinator positions, in all facilities (except at short tour locations), before assuming duties, and maintain proficiency/currency. At short tour locations the TSN will maintain proficiency/currency in the most complex facility. An assistant TSN (CTO examiner when appropriate) must be available to perform certifications and ratings in the facilities in which the TSN is not rated.

1.3.1.1. When AOF officers have less than six years ATC experience (starting with their date of graduation from the Officer's Training Program, or if prior enlisted, graduation from ATC technical training; any assignment out of the unit level does not count toward the six years):

1.5. Facility Staffing. Staff each air traffic control facility with the following minimums:

- Control tower, GCA, or RFC: One watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and one qualified controller (Thule and Soto Cano need one watch supervisor qualified controller only) or civilian equivalent (GS 2152 Terminal). A Control tower, GCA, or RFC may operate with only one watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) during mid-shifts or other than published operation hours.

- RAPCON: One watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and two (one for Thule AB) qualified controllers or civilian equivalent (GS-2152 Terminal). RAPCON without PAR function, one watch supervisor qualified 7-level or civilian equivalent (GS-2152 Terminal) and one qualified controller or civilian equivalent (GS-2152 Terminal).

NOTE: All units must ensure additional controllers are on duty, as required, to cover periods of increased traffic.

1.5.8. (Added) Emergency Staffing Level (ESL):

NOTE: Does not apply to ANG locations. ANG/DOB will ensure that a program is in place to monitor ANG staffing levels.

1.5.8.1. The ESL represents the minimum number of qualified controllers necessary to provide normal ATC services without degradation of safety. It prevents over-extension of the available controller force during periods of degraded staffing. Units may operate a facility at ESL not longer than 60 days.

1.5.8.1.1. Units will provide ESL forecasts to their MAJCOMs based on PCS, TDY, DNIC, etc. The MAJCOMs shall determine how often units provide the forecasts (monthly, quarterly, etc.) and how much notice the units will give the MAJCOMs prior to reaching ESL (30 day, 60 days, etc.).

1.5.8.2. Base ESL computation on absolute minimum position staffing per shift, per complex, to provide services advertised. Units will send ESL computations for each complex to the MAJCOM OPR for ATC for validation each year. If variances exist to authorized manning, address them with the computed figure. MAJCOMs will advise each unit of total seven- and five-level validated requirements. The following stipulations apply:

1.5.8.2.1. One seven-level per shift unless a variance justifies additional requirements.

1.5.8.2.2. Use a SC concept for all facilities where possible.

1.5.8.2.3. During known low traffic periods (swing, mid, weekend and holiday shifts), consider combining positions to reduce the number of controllers on shifts to afford adequate controller staffing during normal flying periods.

1.5.8.2.4. Do not consider positions authorized in FAC 13E100, 13E125, and host-nation controllers when computing ESL.

1.5.8.3. When the number of qualified controllers reaches or drops below ESL the OSS/CC, or equivalent, should pursue one or more of the following options:

1.5.8.3.1. Recall qualified controllers from base and organizational duties.

1.5.8.3.2. Curtail certain peripheral ATC services, such as multiple precision radar approach capability, monitoring approaches during visual meteorological conditions, etc.

1.5.8.3.3. Combine positions of operation where possible.

1.5.8.3.4. Increase controller duty hours.

1.5.8.4. Before taking any of the above actions AOF management will schedule dual-certified personnel from other facilities, the facility chief controller, and all other personnel in FAC 13E100 (except the AOF/CC) who hold certifications to work in the affected facility. The first day of the 60-day period begins after assigning all qualified controllers to the affected facility.

1.5.8.5. MAJCOMs must make every effort to resolve ESL problems with MAJCOM resources before requesting help from AFPC. If personnel actions taken have not alleviated the adverse conditions, and the facility remains at ESL (when using the above personnel) at the end of the 60-day period, reduce services and or hours.

1.9. Operating Initials. Controllers will be assigned two-letter operating initials to identify them for record purposes. Unless signatures are specifically requested, controllers use assigned operating initials for all operating forms, interphone contacts, marking of recorder tapes, cassettes, digital audio tapes (DAT), and other records. A list of controller initials will be maintained by the CCTLR. *NOTE*: Duty rosters with name and initials can meet this requirement.

1.10. Local Operating Procedures. (Letters of Agreement, Operations Letters, Operating Instructions, Operations Plans (Oplan), and Base Directives). (See Attachment 16 for required LOPs and base airfield operations instruction items).

1.10.2. Send local operating procedures, except administrative and facility operating instructions which address administrative matters only, to host MAJCOM OPR for ATC for approval before publication. This review ensures local directives follow United States, host nation, and Air Force ATC policy. Combat communications units have approval authority when deployed in support of tactical operations. Include MAJCOM in distribution of final documents.

1.10.11.1. An ATC instruction provides a source document for local ATC situations and procedures. (See paragraph 10.5.4. and attachment 16).

2.3. Facility Clocks. A reliable clock showing hours, minutes and seconds must be visible from each control position. Facilities without a direct coded time source must obtain a time check every 8 hours. Acquire time checks from IFR facilities equipped with a coded time source, any one of the standard frequency radio time stations listed in FAAO 7210.3, the US Naval Observatory (DSN 762-1401), or the radar facility that provides approach service. Check clocks immediately after the facility goes on backup power and again 30 minutes after. If found to be inaccurate, check clocks hourly until restoring normal power.

2.6. Emergency Warning and Evacuation Alarms. Install emergency warning and evacuation alarms in each GCA, MRAPCON, and RSU located 750 feet or less from the runway centerline, or less than 1500 feet from the end of the runway. Runway Supervisory Units (RSU) and Runway Monitoring Units (RMU) are exempt, if immediate communications exist between the control tower and the RSU or RMU, and an LOP addresses alternate notification procedures. *NOTE*: MAJCOMs and/or local units may supplement this paragraph to require that any shelter within the above dimensions have alarms.

2.7.1. Multi-channel recorders/Digital Voice Recording Systems (DVRS) must have an approved time source installed (e.g. Global Position Satellite). Use one channel to record the time source.

2.11.5.3. Define multiple approach, where required, in an LOP.

2.21.2.1. At locations where snow accumulation affects the ILS glide slope and causes the RSI to alarm, the WS will attempt to reset and clear the alarm. If unable to reset, immediately call and report the outage. The AOF/CC shall coordinate with NAVAIDs Maintenance and CE to have the snow removed, packed down, etc. Dependent upon the amount of snowfall, a flyability/special flight check may be necessary to determine glide slope angle acceptability. Ensure procedures are covered in a LOP. *NOTE*: See AFI 21-116, *Maintenance Management of Communications-Electronics*, attachment 11.

2.27.1.2. The FAA is the authoritative source for the software maintenance of the ATC systems they support (i.e., Micro-EARTS, STARS, ETVS, DVRS, etc.). System Operator's Manuals and Computer Program Functional Specifications (CPFS) are directive in nature.

3.5. Functional Use of Tower Radar Displays. Use tower radar displays to perform specific functions according to FAAO 7110.65. MAJCOMs may authorize use of tower radar displays for additional functions when a clear operational need exists. MAJCOMs will forward all such approved procedures to AFFSA/XA for review.

3.9. Departure/Arrival Separation. During IMC conditions, cancel automatic releases. In addition, prohibit takeoff or taxi into position and hold clearances when arriving IFR aircraft are four miles or less

from the runway, unless visual separation can be applied between aircraft on the runway and aircraft on final.

4.9.5. DELETE

4.11.2. Automated ATC narrow-band radar systems shall not be used for operational purposes unless they are operationally validated (certified) by ATCALS maintenance personnel. Unvalidated radar sensors (i.e., failed or out of tolerance) shall be inhibited from the system until validated for use. An entry shall be made on AF Form 3616 when the digitized radar system is validated for operational use and/or when an unvalidated radar sensor is inhibited or restored to the operational system.

4.15.1 (Added) CCTLRs will ensure an MSAW alarm operational test is accomplished at least weekly and procedures are detailed in their periodic equipment checklists as per paragraph 2.2.

4.17.1.2. Procedures for radar vectoring IFR departures below the MVA and radar vectoring below the MVA within 3-5 miles of an obstacle.

4.17.1.2.3. Restrictions to DVAs, caused by other than close-in obstacles, shall be described on either a new or existing video map.

4.17.5. Ensure that controllers are familiar with all the provisions of the facility directive before vectoring aircraft in accordance with DVA criteria.

4.23. (Added) Center Radar Presentation (CENRAP):

4.23.1. PURPOSE. This guidance prescribes air traffic control (ATC) procedures and phraseology for use by personnel providing ATC services using CENRAP.

4.23.2. DEFINITIONS:

4.23.2.1. CENRAP. A computer program that permits the processing of specified En Route HOST Secondary Target Radar information by the Programmable Input Data Processor (PIDP) and the presentation of this information on the radar position displays. This program is used as a backup system when the terminal radar fails and/or is out of service. CENRAP requires that the PIDP processor be operational.

4.23.2.2. CENRAP-Plus. The process which simultaneously presents CENRAP secondary radar information and terminal airport surveillance radar (ASR) information at the radar display. This process is used when only the ASR secondary beacon radar system fails and/or is scheduled out of service.

4.23.2.3. North Mark. A beacon data block sent by the HOST computer to be displayed by the PIDP on the 360-degree magnetic bearing from the ASR site. The North Mark is used to ensure correct range/azimuth orientation during periods of CENRAP.

4.23.3. BACKGROUND. This document revision incorporates requirements contained in related Federal Aviation Administration (FAA) orders and also includes the guidance contained in GENOT 3/54, Notice 7110.92, dated 7/23/93. CENRAP is a combined software, hardware, and procedures program to provide PIDP facilities with the HOST center radar presentation in the event of terminal radar system failure or nonavailability. It was developed to provide a limited radar environment that allows a more expeditious means of controlling aircraft than utilizing nonradar procedures.

4.23.4. PROCEDURES:

4.23.4.1. CENRAP-Plus. All standard terminal primary target radar separation standards shall apply when in CENRAP-Plus except the use of Mode C altitude readout for vertical separation purposes.

4.23.4.2. CENRAP. The following separation criteria and limitations are intended to provide ATC service during periods of terminal radar failure. It is not intended to increase the level of air traffic services provided beyond that which is provided during normal operations.

4.23.4.2.1. Use vertical separation of 1,000 feet between instrument flight rules (IFR) aircraft, and between visual flight rules (VFR) aircraft when passing below or behind a heavy aircraft or B-757. Use 500 feet vertical separation between VFR aircraft and other VFR or IFR aircraft when heavy aircraft are not involved. The use of Mode C altitude readout for vertical separation purposes is not authorized.

4.23.4.2.2. The following lateral separation may be used in lieu of vertical separation. The lateral separation standard shall apply to all IFR aircraft and all VFR aircraft receiving sequencing and/or separation service.

4.23.4.2.2.1. Five miles radar separation.

4.23.4.2.2.2. Apply all appropriate wake turbulence separation criteria as per Order 7110.65.

4.23.4.3. Provide traffic advisories, workload permitting, and safety advisories to IFR and VFR aircraft when operating in CENRAP. In addition, when sequencing and/or separation services to VFR aircraft are normally provided, the Chief Controller (CCTLR) shall determine if these services can be provided to VFR aircraft without impacting services to IFR aircraft during CENRAP operations. Procedures for providing separation and/or sequencing services to VFR aircraft shall be included in an operating instruction if it is determined these services will be provided.

4.23.4.4. Vertical separation between aircraft on passing and diverging courses shall be applied in accordance with Order 7110.65, Paragraph 5-5-6b(3), En Route.

4.23.4.5. Visual separation standards shall be applied in accordance with Order 7110.65, Paragraph 7-2-1a, Terminal.

4.23.4.6. Separate aircraft from obstructions by Five miles.

NOTE: THE PROMINENT OBSTRUCTION PROTECTED AIRSPACE SCRIBED ON A TERMINAL VIDEO/GEO MAP IS NOT SHOWN AS 5 MILES.

4.23.4.7. Separate aircraft from adjacent airspace in accordance with Order 7110. 65, paragraph 5-5-9a3, and b3 .

4.23.4.8. Separate aircraft from edge of the scope in accordance with Order 7110.65, paragraph 5-5-10c.

4.23.4.9. When visual separation cannot be provided, separate a departing aircraft from an arriving aircraft on final approach by Five miles.

4.23.4.10. Provide the following separation between aircraft when conducting parallel Instrument Landing system (ILS)/ Microwave Landing System Approaches (MLS) Five miles.

4.23.4.11. Simultaneous parallel ILS and MLS approaches are not authorized when using CENRAP.

4.23.5. CERTIFICATION AND PERFORMANCE CRITERIA:

4.23.5.1. Perform an alignment check before using CENRAP in accordance with Order 7110.65, paragraph 5-1-2. Position reports from targets of opportunity shall be used if unable to comply with Order 7110.65, paragraph 5-1-2.

NOTE: A video/geo map mark which aligns with the North Mark generated by the HOST computer shall be scribed on the video maps.

4.23.5.2. An entry shall be made with an appropriate explanation in the Daily Record of Facility Operation, AF Form 3616, as follows:

4.23.5.2.1. When required to switch to a CENRAP operation.

4.23.5.2.2. During periodic checks of CENRAP.

4.23.5.2.3. During periods of CENRAP training.

4.23.5.3. Advise pilots when the primary radar is out of service and CENRAP is in operation. Phraseology: (IAW FAAO 7110.109A) PRIMARY RADAR OUT OF SERVICE. VFR SERVICES ARE AVAILABLE ONLY TO AIRCRAFT WITH TRANSPONDERS AND ARE LIMITED TO SAFETY ALERTS, TRAFFIC ADVISORIES, SEPARATION (if appropriate) AND SEQUENCING (if appropriate) TO (name of airport).

4.23.5.3.1. The advisory may be omitted when provided on the automatic terminal information service (ATIS) and the pilot indicates having the ATIS information.

4.23.5.3.2. Issue a Notice to Airman discontinuing VFR separation services when using CENRAP provided these service are normally provided by the facility.

4.23.6. RADAR SERVICE LIMITATIONS:

4.23.6.1. Surveillance approaches are not authorized when using CENRAP.

4.23.6.2. Minimum safe altitude warning and conflict alert are not available with CENRAP or CENRAP-Plus.

4.23.6.3. Center weather data is not available when using CENRAP/CENRAP-Plus.

4.23.6.4. The normal PIDP video/geo map will be used with center radar input. Fix accuracy checks shall be completed in accordance with AFI 13-203.

4.23.6.5. Prearranged coordination agreements or directives which require the use of Mode C altitudes shall not be exercised during CENRAP operations.

4.23.7. FLIGHT CHECK CERTIFICATION REQUIREMENTS:

4.23.7.1. CENRAP must be flight checked prior to initial operational use. The flight check must be completed with a FAA flight inspection aircraft to verify the minimum altitudes at which a CENRAP target can be tracked within the terminal airspace.

4.23.7.2. The CENRAP operating instruction required in paragraph 4.23.8.1. shall include minimum altitudes that targets can be tracked with CENRAP.

4.23.7.3. Records of CENRAP flight inspections shall be in accordance with AFMAN 11-225, United States Flight Inspection Manual.

4.23.8. LOCAL PROCEDURES:

4.23.8.1. An operating instruction shall contain as a minimum the following:

4.23.8.1.1. The operational steps required to transition to and from CENRAP/CENRAP-Plus operations.

4.23.8.1.2. The minimum altitude(s) that targets can be tracked with CENRAP or CENRAP-Plus in the terminal airspace (4.23.8.1.2. Reference - Paragraph 4.23.7.1.).

4.23.8.1.3. The level of VFR services to be provided and the procedures to follow for these services (4.23.8.1.3. Reference - Paragraph 4.23.4.3.).

4.23.8.1.3.1. Local procedures shall be developed between tower and approach to permit VFR arrival/ departure operations in the event that VFR sequencing services normally provided to the primary airport cannot be accomplished.

4.23.8.2. Training and proficiency requirements.

4.23.8.2.1. Facilities which utilize CENRAP or CENRAP-Plus as a primary backup mode shall:

4.23.8.2.1.1. Include within their respective operating instructions the operational steps required to transition to and from the CENRAP/CENRAP-Plus mode. The CCTLR shall ensure personnel are knowledgeable in the procedures used to transition to and from the backup mode, and that personnel can apply the appropriate separation standards for that mode.

4.23.8.2.1.2. The Chief, Air Traffic Control Training (CATCT) and Chief, Standardization and Evaluation (CSE) shall ensure such training is consistent with local operational needs and in compliance with:

4.23.8.2.1.2.1. Identify Radar Operations: References to applicable procedures in FAAO 7110.65. TR: FAAO 7110.65, paragraphs: 4-5-1, 5-1-1, 5-1-2, 5-5-3d and e, 5-5-9a3 and b3, 5-5-10c, 5-5-63b, and AFI 13-203, paragraph 4.11.

4.23.8.2.1.2.2. Classroom Training: References to AFI 13-203, paragraph 4.23. The CATCT will develop and conduct training from the TRs in paragraph 4.23.8.2.1.2.1., 4.23.4. (Procedures), and 4.23.5 (Certification and Performance Criteria), and 4.23.8. (Local Procedures). Incorporate training into all applicable facility position certification guides.

4.23.8.2.1.2.3. Qualification/Certification: Document task items on AF Form 797. Certifying official signs off controllers' ability to employ CENRAP. The CSE will evaluate and certify controllers who successfully complete CENRAP operations. The evaluation will be documented on AF Form 623a and retained in the individuals training records until the next annual evaluation.

4.23.8.2.1.3. CENRAP procedures are used once a month for proficiency, typically on a Sunday.

4.23.8.3. A LOA with the host ARTCC is required prior to implementing CENRAP.

4.23.9. HOST CENTER RESPONSIBILITIES (IAW FAAO 7110.109A, *Center Radar Presentation*):

4.23.9.1. Facility managers shall provide the appropriate operational personnel with the following CENRAP/CENRAP-Plus information.

4.23.9.1.1. In the event that the HOST center has exceeded, or is about to exceed the number of ARTS/ PIDP facilities which can be sent CENRAP/CENRAP-Plus for processing, terminate processing in the following order:

4.23.9.1.1.1. First, facilities engaged in CENRAP/ CENRAP-Plus operations for proficiency or training.

4.23.9.1.1.2. Second, facilities with the lowest level of existing/projected traffic.

4.23.9.1.2. Termination of CENRAP/CENRAP-Plus processing to the PIDP/ARTS facility(s) shall not take place until the PIDP/ARTS facility has been notified and adequate time has been provided to prepare for the loss of center target information.

6.3.3.1.1. DELETED.

6.3.3.2. (Added) Units with AUS workcenters must develop TCGs based on local AF Form 797 requirements IAW paragraph 6.6.2.1. As a minimum, the following AUS TCGs are required:

- CATCA (management tasks)
- Automation Specialist (to include all equipment/system administration tasks for location)

6.5.1.3. Before completing SEI requirements, all 1C131 controllers must complete combat skills familiarization training according to AFI 10-403, paragraph 2.5.2. NOTE: The optimum time for this training to take place is during the 3 months prior to beginning upgrade training.

6.6.2.2. Management training should be conducted by the individual currently holding the management position. Task certification should be conducted by other staff members who have completed task certifier's training and are qualified on the appropriate section of AFJQS 1C1X1-002 (AF Form 797 for AUS work centers) as CCTLRs, CSEs, CATCTs, TSNs, and CATCAs. When this is not possible, AOF/CCs who have completed certifier's training should certify tasks in the applicable section of AFJQS 1C1X1-002. *Certification Exception:* Certification of TERPS knowledge/task items will only be accomplished by a previously certified TERPS specialist at the unit or by MAJCOM/HQ AFFSA TERPS personnel who have completed task certifier training. Certification of AUS knowledge/task items will only be accomplished by a previously certified SSgt 5-Level or higher AUS or CATCA at the unit. Certification of CATCA knowledge/task items will only be accomplished by a previously certified CATCA at the unit. If unit personnel are not available to certify the items, MAJCOM or HQ AFFSA AUS personnel who have completed task certifier training may certify the tasks. The unit commander must designate these certifiers in writing.

6.6.6. Combat Skills Familiarization Training: All controllers identified to deploy (UTC assigned) must complete all required training according to Chapter 14, AFI 10-403, and AFMAN 13-220.

6.7. Air Traffic Control Training Device (ATCTD). The ATCTD is a mission essential equipment resource required to train radar air traffic controllers. ATCTDs must not be used as a word processing device, nor used for any purpose other than training air traffic controllers. The administrator must work closely with the CATCT to incorporate training materials and scenarios. Only authorized software programs may be loaded on the ATCTD. MAJCOMs may reallocate ATCTDs to other locations within their command to satisfy air traffic control radar simulation training requirements. *NOTE:* Locations with automated ATC radar systems will use the embedded simulation capabilities (i.e., Enhanced Target Generator, AT Coach, etc.) in place of the ATCTD.

6.7.3. The ATCTD may be used to supplement evaluation procedures to evaluate those skills not observed with live traffic (e.g., tasks controllers do not routinely perform, such as transition to and from non-radar procedures).

6.12.13. (Added) Center Radar Presentation (CENRAP) (if applicable). Conduct semi-annually. TR: 4.23.

8.7.1.1. For Other Than Reinstatement. Annotate on AF Form 3616, *Daily Record of Facility Operation:*

- Who is performing the special evaluation.
- Who the special evaluation is being conducted on
- Positions the special evaluation is being conducted in.
- Reason for the evaluation.
- Document unsatisfactory results on AF Form 623a or suitable substitute. Forward to the CCTLR for review and appropriate action.

8.7.1.2. Reinstatement. Annotate on AF Form 3616, *Daily Record of Facility Operation:*

- Who is performing the special evaluation.
- Who the special evaluation is being conducted on.
- Positions the special evaluation is being conducted in.
- Reason for the evaluation.
- Document all special evaluation results on AF Form 623a or suitable substitute. Retain for 1 year after reinstatement or until an annual evaluation is complete whichever is sooner.

9.3.2.2. For all other categories (other than medical), including drug use or abuse and alcohol abuse, notify MAJCOM/DP of the ATCS certificate withdrawal so they can initiate action to remove the AFSC.

10.5. Local Operating Procedures (LOP). Each regulatory instruction issued to an ATC facility must be in a memorandum of agreement (MOA), memorandum of understanding (MOU), letter of agreement (LOA), operations letter, operating instruction (OI), base airfield operations instruction, or operations plan (OPlan). (See Attachment 16 for required LOPs and base airfield operations instruction items). Send local ATC operating procedures, except administrative and facility operating instructions which address administrative matters only, to the host MAJCOM ATC OPR for approval before publication. This includes base and unit level instructions that have ATC taskings. When forwarding LOPs for approval, attach a cover letter that describes each change along with background rationale for each change. LOPs must have MAJCOM approval prior to the effective date and signature.

10.5.4. Use the base airfield operations instruction as a source document for local ATC situations and procedures. A list of minimum required items is in attachment 16.

10.6. Current Indexes. Each ATC operations office and facility must maintain a current index of applicable LOPs. Forward copies of current indexes to MAJCOM every year (month determined by individual MAJCOMs). Index should include date of LOP, date of LOP review, and date of MAJCOM approval.

11.2. Recorded Records. Retain all recorder tapes (analog and digital)/cassettes and data extraction disc recordings for a minimum of 15 days. Facilities equipped with automated radar systems shall retain all console typewriter printouts (or stored capture files if the feature is available) for a minimum of 30 days. The CATCA will review all printouts or stored capture files for system abnormalities and occurrences. Review and documentation procedures of console data printouts or stored capture files shall be contained in a facility directive. Protect recorded records of aircraft mishaps, alleged deviations, or hazardous air traffic reports (HATR) to the degree necessary to prevent unauthorized access. Facilities equipped with automated radar systems will also protect console data printouts (or stored capture files) and printed data reduction hard copies. Locked receptacles (file cabinets, desks, or safes) are adequate for storing this material.

11.5. Actions Following an Aircraft Mishap. The WS or SC notifies the CCTLR and other persons listed in local checklists and directives. Request an aircraft mishap local weather observation. Remove, label, store, and safeguard pertinent recording tapes (analog and digital), cassettes, and discs. Coordinate facility and runway status with other ATC agencies and request necessary NOTAMs.

11.6.1. The AOF/CC is custodian for recorder voice tapes (analog and digital)/cassette and data extraction disc recordings in Air Force ATC facilities.

11.8. Removing Original Records. Do not release recorded or written records concerning mishaps without authority from the OG/CC. Release the original voice recording for official use to a recognized investigation authority. Keep a copy of the original recording with the custodian. NOTE: In accordance with FAA guidance, a DAT recording derived from the hard drive of the DVRS certifies as an original recording.

11.8.2. If there is a need for a transcript or an additional tape copy, make it from the original recording. Only two certified re-recordings of the original (DAT) recording should be made. Any additional re-recordings should be made from a certified copy of the original. When making a tape copy include all transmissions from initial call-up to at least 5 minutes after last contact. Use the speaker-to-microphone

(GSH 57/58 Stancil Recorders) method to copy when the equipment will not electronically connect. Preface the reproduction with a statement containing the information in paragraph 11.9.3. Also include the date and time of reproduction, the name of the person supervising the reproduction, and a certification that the reproduction is a true copy of the original recording.

11.18.1.1 Units: Submit unit reports quarterly using the Air Traffic Activity Reporting System (ATARS). Send reports to MAJCOM OPR for ATC not later than 10 workdays after the quarter ends.

11.18.1.2. MAJCOMs. Submit consolidated unit quarterly reports using ATARS. Send reports to AFFSA/XA not later than 30 days after the quarter ends. Reports may be forwarded to AFFSA/XA on computer diskette or electronically transmitted (e.g. EMail).

11.18.2. Focal Points. MAJCOMs, in coordination with AFFSA/XA, approve counting activities in the "Special Use" sub-category. MAJCOMs act as a focal point for units to resolve problems with ATARS. AFFSA/XA acts as the focal point for MAJCOMs to resolve problems with ATARS.

11.18.3. Use of Forms. Units shall document daily, monthly, and quarterly air traffic activities using the ATARS. AF Form 3623, Daily Traffic Count, may be used as a separate backup to the automated report program but not in lieu of it.

14.1.1.7. Base Level Assessment Report. (RCS: HAF-XO[A]9716) Forward Base Level Assessment (BLA)/in-place wartime requirements for each facility (including Base Operations) to HQ AFFSA/XA annually NLT 15 April each odd year (unless otherwise directed).

NOTE: (Added) USAFE and PACAF need only forward BLA on locations with UTC taskings.

14.1.2.1. Review base and host nation war plans at least annually. They must also be familiar with applicable portions of the Base Use Plan (Parts 1 and 2) and Survival Recovery and Reconstitution Plan. (These plans and wing wartime missions will be used to determine sourcing inputs for the BLA and training requirements).

14.1.4. Review AFM 13-220 for specific mobility and deployment requirements.

14.2.2.4. Any unit with a UTC tasking must ensure each tasked controller has full mobility equipment including a gas mask.

14.4.8. USAF War Mobilization Plan (WMP), All Volumes (S).

Attachment 1, Glossary of References

DELETE JANAP 146E, *Canadian-United States Communications Instructions for Reporting Vital Intelligence Sightings*

AFI 37-132, *Freedom of Information Act Program*

DELETE AFMAN 13-214, *Aircraft Surge Launch and Recovery (ASLAR) Procedures*

Attachment 1, Abbreviations and Acronyms

(Added) DAT Digital Audio Tape

DELETE ASLAR Aircraft Surge Launch and Recovery

Attachment 1, Terms

Multiple Approach--When more than one aircraft is on the radar final approach at the same time. Normal radar separation standards apply, and a controller controls only one aircraft, but may monitor two aircraft simultaneously.

Radar Final Control (RFC) Facility--A fixed, mobile, or transportable radar facility which provides RFC service. (PAR rating required for SEI)

(Added) Radar Final Control--An air traffic control service that provides navigational guidance or approach monitoring during the final approach phase of flight. This service normally includes precision approach radar (PAR) approaches, instrument approach monitoring using PAR equipment when final approach courses are coincident, flight following, airport surveillance radar (ASR) approaches and safety alert services. Additional services are provided within system capability. A controller assigned to the radar final control position (called the radar final controller) normally provides this service.

Attachment 13, Section 2 Tower General Certification Guide (Sample) (*NOTE)*

NOTE: When developing a computerized MTTR ensure consistency is maintained throughout the document. For example, when listing FAAO 7110.65 paragraphs ensure all TRs are prefaced with .65/ or when listing AFI 13-203 paragraphs ensure all TRs are prefaced with 203/. This will enable the computer program (i.e., Microsoft Word, Excel) to "find" and "replace" the proper items. If just paragraph numbers are listed under the applicable headings (i.e., under AFI 13-203 paragraph 6.15 is listed and also under NAFBI 13-203 paragraph 6.15 is listed) the computer will identify both references during the "find/ replace" function. When the product has a unique name (i.e., AT-M-03) there is no need to preface the TR.

Attachment 14

Procedures for Establishing VFR Flying Areas and Traffic Patterns

A14.1. VFR Traffic Patterns:

A14.1.1. When designing traffic patterns, be sure that:

A14.1.1.1. They conform to the requirements of paragraphs A14.2 and A14.3 below except when safety or noise problems require adjustments.

A14.1.1.2. No unusual or unnecessary maneuvering is required.

A14.1.2. When traffic patterns for two or more airfields are close together or overlap, coordinate letters of agreement regarding safe operations. The Airfield Operations Board reviews these letters of agreement.

A14.1.3. Coordinate revised traffic patterns with ATC agencies and the MAJCOM.

A14.2. VFR Traffic Pattern Types:

A14.2.1. Establish rectangular and overhead patterns at each Air Force airfield, joint-use airfield, and overseas airfield controlled by the Air Force. Use letters of agreement to provide the desired traffic pattern at airfields under the control of foreign governments or agencies other than the Air Force. Usually, traffic patterns use a left-hand traffic flow; however, you may use right-hand patterns if required.

A14.2.2. Develop closed traffic procedures. Closed traffic is a maneuver which allows an aircraft making successive patterns to stay in the normal traffic flow without exiting and reentering the pattern.

A14.2.3. Bases may establish an additional rectangular pattern for light aircraft. This pattern provides adequate separation from normal rectangular and overhead pattern traffic.

A14.2.4. Establish separate helicopter patterns, if needed. You don't need these patterns if the rectangular or light aircraft patterns meet operational needs without creating congestion.

A14.3. VFR Traffic Pattern Altitudes. Establish traffic pattern altitudes to the nearest 100-foot level relative to the airfield elevation. For example, the traffic pattern altitude for a 1,000-foot traffic pattern with a field elevation of 245 feet would be 1,200 feet above mean sea level. Traffic pattern altitudes must provide a minimum of 300 feet obstruction clearance within 1 mile either side of the established ground track. Establish traffic pattern altitudes as follows:

A14.3.1. Rectangular pattern: 1,000 feet above field elevation (1,500 feet if a lower altitude causes a noise problem).

A14.3.2. Overhead pattern: 1,500 feet above field elevation (2,000 feet if the 1,500 foot rectangular pattern is used or if a lower altitude causes a noise problem).

A14.3.3. Light aircraft pattern: At least 500 feet above field elevation. In all cases, ensure adequate separation from normal rectangular pattern traffic.

A14.3.4. Helicopter patterns: Establish specific altitudes that ensure adequate separation from traffic in other patterns.

A14.3.5. Closed traffic: The altitude specified usually corresponds to the altitude of the pattern for which closed traffic is established.

A14.4. Disseminating Flight Information. When issuing directives or establishing agreements:

A14.4.1. Provide copies to nearby civil and military airfields, ATC agencies, FAA FSSs, FAA Flight Standards District Offices, and other interested parties.

A14.4.2. Send a description of VFR departure or arrival routes to AFFSA/XO for entry in FLIP Area Planning.

A14.4.3. Send a description of any traffic pattern that deviates from standards as approved by the MAJCOM, to HQ AFFSA/XO, for entry in FLIP.

A14.4.4. Ensure airfield management specialists display or inform transient aircrews of local departure procedures and significant airfield hazards or conditions.

A14.4.5. Contact the Air Force Representative (AFREP) at the appropriate FAA region for guidance if traffic flow conflicts arise that cannot be resolved locally. Also notify the MAJCOM OPR.

A14.5. Environmental Impact Analysis and AICUZ. Before making changes to local VFR flying areas, VFR traffic patterns, or altitudes, analyze proposals for impact based on the published AICUZ study and potential environmental impact. Submit AF Form 813, Request for Environmental Impact Analysis, to the base civil engineering environmental planning staff for approval (see AFI 32-7004). The Environmental Impact Analysis Process must be completed prior to making any decision to implement the proposed change. Advise the base civil engineer when the proposed change has been implemented

Attachment 15 (added)

Attachment 15

Base Level Assessment (BLA)

A15.1. Concept: In support of the two major regional contingency (MRC) scenario, ATC and base operations personnel will deploy to wartime locations while others remain in-place to support operations at CONUS bases. Airfield operations support for CONUS bases during a two MRC scenario is vital. This includes the requirements to control delegated airspace in the National Airspace System (NAS) during contingencies since the FAA may not be manned to assume the responsibility. To meet this goal, nonessential activities will be reduced to a minimum. Essential activities will continue or expand depending on the situation.

A15.2. DETERMINING IN-PLACE MANPOWER REQUIREMENTS:

A15.2.1. Tasks. Review wartime support requirements for airfield operations and determine the number of personnel required (in-place and deployable). Bases apply the matrixes for their respective facilities and identify and document, by AFSC, each position which is required to accomplish in-place wartime support functions. Provide justification to the MAJCOM to validate variances to the matrix. The matrixes are BLA standards only and should not be used in peacetime manpower reviews.

A15.2.2. Assumptions.

A15.2.2.1. Use authorization, NOT personnel assigned to conduct this assessment.

A15.2.2.2. Military experience levels in CONUS will rapidly decline as experienced military members deploy to the theater.

A15.2.2.3. Commanders will implement expanded hour work weeks (10 hours/day, 6 days/week to include civilians).

A15.2.2.4. The term sustaining will also apply to theater bases that are not contingency beddowns or used as through ports.

A15.2.2.5 Categories A and B-Full and continuous operations is considered 24 hours/day, 7 days a week operations, categories C and D-partial operations is considered 12 hours/day, 7 days a week operations, and categories E and F no flightline operations means the airfield is closed (see paragraph 2d).

A15.2.2.6. Primary CONUS missions are strategic airlift and pilot training at AETC bases. Pilot training will not surge.

A15.2.2.7 Limited flying at fighter bases (less than a squadron of aircraft on base).

A15.2.2.8 All leaves and non-deployment TDYs are canceled.

A15.2.2.9 The Defense Planning Guidance (DPG) determines the type of scenario used for determining BLA. Currently, 2 MRC scenario is used to size the force.

A15.2.3. Planning Factors.

A15.2.3.1. Hours of operations for radar approach controls (RAPCONs) and ground control approaches (GCAs) are independent of base flightline operations since they are an integral part of the National Airspace System (NAS) while tower, radar final control, and base operations will vary depending upon the hours of operations of the airfield.

A15.2.3.2. PAR services terminated, except at pilot training locations where required by operational community (PAR must be in training syllabus as check ride item).

A15.2.3.3. Combine positions where traffic permits.

A15.2.3.4. 3-level authorizations are required in-place in order to continue training. (facility qualified 3 levels can be substituted for 5 levels)

A15.2.3.5. Requirements must be based on the emergency work week of 10 hours per day, 6 days per week, or a 60 hour week. See WMP-1 Annex Z for more detailed information. Note: You may need to consider total manhours for the facility, not by position, in calculating the 60 hour work week for manpower purposes.

A15.2.3.6. RAPCONs/GCAs at locations with no flightline operations (categories E and F) will need to find an alternate source for weather information. See FORSIZE/BLA Annex CC, Weather for more details.

A15.2.3.7. Administrative specialists revert to the control of the squadron.

A15.2.3.8. Few practice approaches flown at other than AETC bases.

A15.2.4. Suggested Steps:

A15.2.4.1. Use the UMD to determine number of authorizations.

A15.2.4.2. Find the Base Use category for your base. Your plans office should have this information. That will determine the hours of operations for your facilities.

A15.2.4.3. Estimate traffic loads. If most of the wing is deployed, then civil traffic may be your only workload.

A15.2.4.4. Determine minimum number of positions required for each facility to support operations.

A15.2.4.5. Using the 10 hr work day, determine the minimum number authorizations needed to support the in-place mission (e.g., multiply the number of shifts by the number of positions required. Add a chief controller position. This number is your BLA (in-place requirements). With the 10 hr day standard you may need to do some creative scheduling.

A15.2.4.6. Compare your number with the matrixes and justify any variances for additional manning above the wartime standard.

A15.2.4.7. The difference between authorized and BLA should be your UTC numbers and allow for up to 2 DNICs per complex.

Airfield Operations In-place Requirements Charts

AIRFIELD MANAGEMENT AND BASE OPERATIONS MANNING (1C0X1)

Positions	Cat A/B	Cat C/D	Cat E/F/G
Airfield Manager	1	1	1
Base Ops Controllers	7 Note 2	6 Note 2	2
FLIP Manager/ Aircrew Briefer/COMSEC	1Note 3		
TOTAL	9	7	3

Note 1 Manning is based on a minimum of “two” operations controllers for all shifts.

Note 2 Base Ops Supervisor will augment the airfield manager and supervise Base Operations activities.

Note 3 Full and continuous contingency operations, will require increased support for aircrews.

Note 4 The Quality Assurance position at AETC bases is required.

AIR TRAFFIC CONTROL MANNING (13MX & 1C1X0)

Positions	A/B	C/D	E/F
Flt Support Element	2	2	1
Tower Element	9	7	4
RAPCON Element	25	20	20
GCA Element	13	10	10
RFC Element	N	N	N

N-Not Required except as noted in paragraph 2c(2).

Note 1: Matrix does not include three levels (includes 2c(4)).

Note 2: Flight Support Element positions (2): AOF/CC and CSE/CATCT (TSN). CAM in airfield management matrix.

Note 3: Tower (2 & Chief Controller): Local, Ground/Flight Data. Cat E/F required to open facilities upon return of aircraft while awaiting deployed controllers return.

Note 4: Radar (6 & Chief Controller): Approach, Approach Assist, Departure, Departure Assist, Arrival, WS (Senior controller on mid shifts), and Clearance Delivery (required to support wing flying only).

Note 5: GCA (3 & Chief Controller): Arrival, Assist, WS (senior controller on mid shifts).

Note 6: Facility position requirements are for each shift.

Sample reporting format (excel spreadsheet will be provided by AFFSA/XAXW)

Base	Authorized	In-place required	Deployment (UTC) Taskable
TWR			
1C191			
1C171			
1C151			
1C131			
RDR			
1C100			
1C171			
1C151			
1C131			
AM/Base Ops			
1C091			
1C071			
1C051			
1C031			
Civ			

Attachment 16 (added)

Attachment 16

REQUIRED LOP and BASE AIRFIELD OPERATIONS INSTRUCTION ITEMS

Table A16.1. Required Base Airfield Operations Instructions Items.

SUBJECT	SOURCE

Standard Go-around Procedures	AFI 13-203, Para 1.10.11.1.
Precision Approach Areas	AFI 13-203, Para 2.26.
Hours of Operation	AFI 13-203, Para 2.1.
Multiple Approach and ASLAR Procedures	AFI 13-203, Para 2.11.5.4.
Opposite Direction Traffic	AFI 13-203, Para 2.13.
Primary Crash Alarm System	AFI 13-203, Para 2.16
Continuity of Air Traffic Services	AFI 13-203, Para 2.25.
Control of Ground Traffic and Vehicles (Recall Procedures)	AFI 13-203, Para 3.3.
Protection of 360 Overhead	AFI 13-203, Para 3.7.
Air Base Defense	AFI 13-203, Para 4.12.
ASR Wind Limitations	AFI 13-203, Para 4.14.
Multiple Radar Final Control Requirement	AFI 13-203, Para 4.19.
Arresting Systems	AFI 13-203, Para 5.2.
Aircraft Priorities	AFI 13-203, Para 5.4.
Reduced Runway Separation	AFI 13-203, Para 5.5.
Min Comm/Comm-out Procedures	AFI 13-203, Para 5.8.
Hot Brake or Hot Gun Procedures	AFI 13-203, Para 10.5.4.
Inflight Emergency Response	AFI 13-203, Para 10.5.4.
Noise Abatement	AFI 13-203, Para 10.5.4.
Tower Responsibility For Aircraft Movement Area	AFI 13-203, Para 10.5.4.
Intersection Takeoff Diagram	AFI 13-203, Para 11.3.1.
Airfield Operations Board Membership	AFI 13-203, Para, 12.5.2.
Airfield Operations Board Agenda Items for Review	AFI 13-203, Para 12.5.4.
Traffic Patterns/Local Flying Area	AFI 13-203, Atch 14.

NOTE: This list is not intended to be all-inclusive. Each location is responsible for determining any additional requirements, or listed requirements that do not apply.

Table A16.2. Required LOP Items.

SUBJECT	SOURCE
ATCALS Restoration Policies	AFI 13-203, Para 1.6
Emergency Warning and Evacuation Alarm Notification Procedures	AFI 13-203, Para 2.6
Multi-Channel Recorder Procedures	AFI 13-203, Para 2.7.
Alternate Communications	AFI 13-203, Para 2.10
Radar and Tower Coordination	AFI 13-203, Para 2.11.5.1
Interruptions to ATCALS/Maintenance, ATC Coordination	AFI 13-203, Para 2.20.2
NAVAID Status Reporting	AFI 13-203, Para 2.21.2
ILS Critical Area (Snow Removal)	AFI 13-203, Para 2.21.2.1.
NAVAIDs Without Internal Monitors	AFI 13-203, Para 2.21.4
Procedures for Placing ATCALS on Back-up Power	AFI 13-203, Para 2.22.
Bypassing Interlocks (Multiple ILS Facilities)	AFI 13-203, Para 2.23.2.3
Alternate ATC Facility Operations	AFI 13-203, Para 2.25.
Supervisor of Flying (SOF)	AFI 13-203, Para 5.3
Control Tower Operations	AFI 13-203, Para 10.5.3.
CENRAP Operations	AFI 13-203, IC 97-1, Para 4.23
Radar Operations	AFI 13-203, Para 10.5.3.

NOTE 1: Numerous procedures/practices should be included in a single O.I., e.g., TPX-49 and PIDP procedures should be included in the Radar Operations O.I. Wind limitations and runway-in-use procedures would be included in the Control Tower Operations O.I.

NOTE 2: This list is not intended to be all-inclusive. Each location is responsible for determining any additional requirements, or listed requirements that do not apply.

Attachment 18 (ADDED-AFMC)

MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN AIR FORCE MATERIEL COMMAND (AFMC)
AND
AIR COMBAT COMMAND (ACC)
AIR EDUCATION & TRAINING COMMAND (AETC)
US AIR FORCES in EUROPE (USAFE)
PACIFIC AIR FORCES (PACAF)
AIR FORCES RESERVES (AFRC)
AND
AIR NATIONAL GUARD (ANG)

This MOU defines reduced runway separation (RRS) standards that may be used at AFMC bases and applied between AFMC, ACC, AETC, USAFE, PACAF, AFRC, and ANG aircraft. This MOU supersedes the previous MOU, effective 18 Apr 95.

1. HQ AFMC authorizes the use of the following RRS standards to maximize runway acceptance rates at AFMC bases. Operations Group (Ops Gp)/Air Base Wing (ABW) Commanders will establish procedures based on the following:

1.1. RRS is authorized at AFMC bases and may be applied to base-assigned AFMC, ACC, AETC, AFRC, and ANG aircraft. Additionally, transient/deployed aircraft belonging to AFMC, ACC, AETC, USAFE, PACAF, AFRC, and ANG may be authorized RRS. RRS standards will be published in the base airfield operation instruction. If RRS is authorized for transient aircraft the RRS standards must also be published in the IFR supplement. The Airfield Operations Flight Commander will ensure RRS procedures are published in the base airfield operation instruction and, if applicable, the IFR supplement. RRS is NOT authorized for any Non-USAF aircraft. Forward RRS procedures to HQ AFMC/DOA.

1.2. RRS is not authorized between fighter and trainer aircraft. Exception: Ops Gp/ABW Commanders may authorize RRS between base-assigned AFMC owned fighter and trainer aircraft.

1.3. The minimum RRS is 3,000 feet between similar fighter/fighter or trainer/trainer aircraft except between T-1A aircraft. The minimum RRS is 6000 feet between T-1A/T-1A aircraft, dissimilar fighter/fighter or trainer/trainer aircraft. Formation landings (aircraft landing side-by-side) require 6,000 feet separation ahead and behind. From sunset through sunrise, 6,000 feet is required between all aircraft. Tower controllers must be able to determine distances by suitable landmark references.

NOTE: Similar aircraft means the same airframe; i.e., F-15 to F-15, F-16 to F-16. Base-assigned AFMC owned F-5 and T-38 aircraft may be considered similar aircraft.
1.4. The following similar fighter/fighter or trainer/ trainer operations are authorized 3,000 feet RRS (DAYTIME ONLY):

- Full stop behind full stop/low approach/tough and go.
- Touch and go behind a touch and go/low approach.
- Low approach behind low approach.

1.5. The following similar or dissimilar fighter/fighter or trainer/trainer operations are authorized 6,000 feet RRS:

- Full stop behind full stop.
- Touch and go behind full stop (DAYTIME & VFR ONLY).
- Low approach behind full stop.
- *Full stop behind low approach/touch and go.
- *Touch and go behind touch and go/low approach.
- *Low approach behind low approach/touch and go.

*__NOTE:__ The asterisked separation standards above are authorized by FAAO 7110.65, Chapter 3 and are not RRS standards. This information is included for clarity.

1.6. Pilots are responsible for maintaining at least 500 feet separation when over-flying aircraft on the runway.

1.7. Pilots are responsible for wake turbulence separation unless ATC actions reduce pilot-achieved spacing.

1.8. RRS may not be applied when:

- Emergency aircraft are involved.
- Aircraft are cleared for the option.
- The runway condition reading (RCR) is less than 14.
- The weather is IFR.
- The tower supervisor or local controller determines that safety of aircraft will be jeopardized.
- The runway surface condition is wet.

1.9. It is ultimately the pilot's decision to accept or reject RRS. Pilots must inform air traffic control (ATC) as soon as possible if RRS can NOT be accepted so ATC can adjust sequencing as necessary.

1.10. Any deviations that are less restrictive than RRS standards above require approval from HQ AFMC/DO.

//Signed//	//Signed//
_____	_____
HQ AFMC/DO	HQ ACC/DO
//Signed//	//Signed//
_____	_____
HQ AETC/XO	HQ AFRC/DO
//Signed//	
_____	
NGB/XO	

Attachment 19 (Added-AFMC)

HATR/AIRCRAFT MISHAP REPORT RCS: HAF-SE(AR)7602

A19.1. (Added-AFMC) LOCATION:

A19.2. (Added-AFMC) DATE/LOCAL TIME:

A19.3. (Added-AFMC) CALL SIGN(S) OF AIRCRAFT INVOLVED:

A19.4. (Added-AFMC) TYPE AIRCRAFT INVOLVED:

A9.5. (Added-AFMC) AIR TRAFFIC SERVICES UTILIZED (i.e. Tower, RAPCON, PAR, TACAN, ILS, etc.) :

A19.6. (Added-AFMC) ATCALS STATUS:

A19.7. (Added-AFMC) NAME OF INDIVIDUAL REPORTING HATR/MISHAP:

A19.8. (Added-AFMC) WERE CONTROL INSTRUCTIONS RECORDED AND READABLE?

A19.9. (Added-AFMC) WAS A WATCH SUPERVISOR OR SENIOR CONTROLLER ON DUTY? INCLUDE ACTIONS AT TIME OF OCCURRENCE.

A19.10. (Added-AFMC) NUMBER OF QUALIFIED/SKILLED CONTROLLERS:

- SCHEDULED FOR DUTY:
- ON DUTY:
- IN POSITION:

A19.11. (Added-AFMC) REPORTED WEATHER AT TIME OF OCCURRENCE:

A19.12. (Added-AFMC) NUMBER OF PERSONNEL INJURIES/FATALITIES (if known):

A19.13. (Added-AFMC) BRIEF NARRATIVE OF EVENT:

Attachment 20 (Added-AFMC)

MINIMUM STAFFING REQUIREMENTS BY FACILITY, POSITION AND BASE (AFMC)

412 OSS - EDWARDS CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	10.5 hours
		Local Control	24 hours
		Flight Data	24 hours
		Ground Control	10.5 hours
WEEKEND	TOWER	Local Control	24 hours
		Flight Data	24 hours

72 OSS- TINKER CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	13 hours
		Local Control	24 hours
		Flight Data	24 hours
		Ground Control	13 hours
		CT	8 hours
WEEKEND	TOWER	Local Control	24 hours
		Flight Data	24 hours

75 OSS - HILL CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	16 hours
		Local Control	16 hours
		Flight Data	16 hours
		Ground Control	16 hours
		CT	10 hours
WEEKEND	TOWER	Local Control	16 hours
		Ground Control	10 hours
		Flight Data	16 hours
		CT	1 hour

76 OSS - KELLY CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	12 hours
		Local Control	24 hours
		Flight Data	24 hours
		Ground Control	12 hours

WEEKEND	TOWER	Watch Supervisor	8 hours
		Local Control	24 hours
		Flight Data	24 hours

77 OSS - McCLELLAN CONTROL TOWER			
WEEKDAYS	TOWER	CT	8 hours
		Local Control	16 hours
		Flight Data	16 hours
		Ground Control	8 hours
WEEKEND	TOWER	Local Control	16 hours
		Flight Data	16 hours

78 OSS - ROBINS CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	8 hours
		Local Control	24 hours
		Flight Data	24hours
		Ground Control	16 hours
WEEKEND	TOWER	Local Control	24 hours
		Flight Data	24 hours

DET 1, 46 TG - WHITE SANDS MISSIBLE RANGE MRU			
WEEKDAYS	MRU	Watch Supervisor	8 hours
		Mission Control	19 hours
		Mission Assist	8 hours
		Flight Data	6 hours
WEEKEND	MRU	Mission Control	6 hours
		Mission Assist	5 hours
		Flight Data	1 hour

46 OSS - EGLIN CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	14 hours
		Local Control	24 hours
		Flight Data	24 hours
		Ground Control	12 hours
		CT	8 hours
WEEKEND	TOWER	Watch Supervisor	6 hours
		Local Control	24 hours
		Flight Data	24 hours

		Ground Control	0
		CT	0

46 OSS - DUKE FIELD CONTROL TOWER			
WEEKDAY	TOWER	Local Control	24 hours
		GC/FD	16 hours
WEEKEND	TOWER	Local Control	12 hours
		GC/FD	12 hours

46 OSS - EGLIN RADAR CONTROL FACILITY (ERCF)			
WEEKDAYS	ERCF	Watch Supervisor	16 hours
		North Approach Asst.	16 hours
		North Approach	16 hours
		South Approach	24 hours
		South Approach Asst.	16 hours
		Arrival Asst.	16 hours
		Arrival	16 hours
		North Arrival Asst.	16 hours
		North Arrival	16 hours
		RFC	16 hours
		CI	16 hours
		CA	16 hours
		Range Director	16 hours
		Clearance Delivery	24 hours
		VFR	16 hours
		Water Mission	16 hours
		Water Mission Asst.	8 hours
		Land Mission	24 hours
WEEKEND	ERCF	Watch Supervisor	16 hours
		North Approach Asst.	16 hours
		North Approach	16 hours
		South Approach	24 hours
		South Approach Asst.	16 hours
		North Arrival Asst.	8 hours

		North Arrival	8 hours
		RFC	16 hours
		CI	16 hours
		Range Director	8 hours
		Clearance Delivery	24 hours
		VFR	16 hours
		Water Mission	8 hours
		Land Mission	24 hours

88 OSS - WRIGHT PATTERSON CONTROL TOWER			
WEEKDAYS	TOWER	Watch Supervisor	8 hours
		Local Control	24 hours
		Flight Data	24hours
		Ground Control	8 hours
WEEKEND	TOWER	WatchSupervisor	8 hours
		Local Control	24 hours
		Flight Data	24 hours